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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION **DOCKETED 08/03/07**

ATOMIC SAFETY AND LICENSING BOARD PANEL

Before Administrative Judges: **SERVED 08/03/07**

Ann Marshall Young, Chair
Dr. Peter S. Lam
Dr. Alice Mignerey

In the Matter of:

CAROLINA POWER & LIGHT COMPANY
(Shearon Harris Nuclear Power Plant, Unit 1)

Docket No. 50-400-LR

ASLBP No. 07-855-02-LR-BD01

August 3, 2007

MEMORANDUM AND ORDER

(Ruling on Standing and Contentions of Petitioners North Carolina Waste Awareness and Reduction Network and Nuclear Information and Resource Service)

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I. Introduction

This proceeding involves the application of Carolina Power and Light Company (CP&L) to renew the operating license for the Shearon Harris Nuclear Power Plant, Unit 1 (Shearon Harris or plant), located in New Hill, North Carolina, for an additional twenty-year period. Petitioners North Carolina Waste Awareness and Reduction Network (NCWARN) and Nuclear Information and Resource Service (NIRS), referred to collectively as Petitioners, have filed a request for hearing and petition to intervene in accordance with 10 C.F.R. § 2.309, in which they submit four contentions raising challenges in three principle areas of concern: alleged noncompliance with relevant fire protection requirements, failure to address the environmental impacts of possible aircraft attacks, and certain changes in circumstances that are asserted to render the current evacuation plan for the plant inadequate, in an environmental context.¹ (One

¹ The first of Petitioners’ contentions, concerning fire protection issues, is identified as a “technical” contention, numbered “T-1,” and also herein referred to as “TC-1.” The remaining three are identified as “environmental” contentions, numbered “EC-1,” “EC-2,” and “EC-3.”

of the contentions addresses the alleged combined environmental impact of the first two concerns.) Finally, Petitioners argue that certain backfits are required with regard to the first two areas of concern.

In this Memorandum and Order we find that, while Petitioners have shown standing to participate in the proceeding, they have not submitted any admissible contentions at this time. Therefore, as we are required to do under relevant law, we dismiss their petition and terminate this proceeding. We also address Petitioners' request for certain backfits to the plant, and a motion for stay made during oral argument held July 17, 2007.

II. Background

CP&L's application requesting renewal of Operating License No. NPF-63 was received by the NRC Staff on November 16, 2006.² The current operating license expires on October 24, 2026; the requested renewal would extend the license for an additional 20-year period.³ The NRC published a notice of acceptance and docketing and opportunity for hearing regarding this license renewal application (LRA or Application) on March 20, 2007,⁴ and on May 18, 2007, Petitioners timely filed a petition to intervene and request for hearing.⁵

² Harris Nuclear Plant License Renewal Application (ADAMS Accession No. ML063350270) [hereinafter Application], enclosed with Letter from Cornelius J. Gannon to U.S. NRC (Nov. 14, 2006) (ADAMS Accession No. ML063350267).

³ Application at 1.1-1; see *also* Notice of Opportunity for Hearing, and Notice of Intent To Prepare an Environmental Impact Statement and Conduct the Scoping Process for Facility Operating License No. NPF-63 for an Additional 20-Year Period[,] Carolina Power & Light Company[,] Shearon Harris Nuclear Power Plant, Unit 1, 72 Fed. Reg. 13,139 (Mar. 20, 2007).

⁴ 72 Fed. Reg. 13,139.

⁵ Petition for Leave to Intervene and Request for Hearing with Respect to Renewal of Facility Operating License No. NPF-63 by [NCWARN] and [NIRS] (May 18, 2007) [hereinafter Petition].

On May 25, 2007, the Commission through its Secretary referred the Petition to the Chief Administrative Judge of the Atomic Safety and Licensing Board Panel;⁶ on May 31 this Atomic Safety and Licensing Board (Board) was established to preside over this adjudicatory proceeding;⁷ and on June 5 the Board issued an order providing guidance for the proceeding.⁸ On June 18, 2007, the NRC Staff and CP&L filed responses to the Petition,⁹ and on June 25, 2007, Petitioners filed a reply to these responses.¹⁰

On June 13, 2007, the Board issued an order scheduling oral argument on the petition for July 17, 2007, as well as setting the evening of July 17 for a session to hear limited appearance statements pursuant to 10 C.F.R. § 2.315(a).¹¹ Thereafter, oral argument and the limited appearance session were held in Raleigh, North Carolina, as scheduled.¹² Subsequently, following up on matters that arose at oral argument, Petitioners filed certain affidavits of their

⁶ Memorandum from Annette L. Vietti-Cook to E. Roy Hawkens (May 25, 2007).

⁷ Establishment of Atomic Safety and Licensing Board (May 31, 2007).

⁸ Licensing Board Order (Regarding Schedule and Guidance for Proceedings) (June 5, 2007) (unpublished).

⁹ NRC Staff Response to Petition for Leave to Intervene and Request for a Hearing filed by the [NCWARN] and the [NIRS] (June 18, 2007) [hereinafter Staff Response]; [CP&L's] Answer to Petition for Leave to Intervene of NCWARN and NIRS (June 18, 2007) [hereinafter Applicant's Answer].

¹⁰ Petitioners' Reply to Opposition of CPL and NRC Staff to Petition for Leave to Intervene and Request for a Hearing (June 25, 2007) [hereinafter Petitioners' Reply].

¹¹ Licensing Board Order (Regarding Oral Argument and Limited Appearance Session) (June 13, 2007) (unpublished). *See also* Order (Regarding Oral Argument and Limited Appearance Session) (June 26, 2007) (unpublished); Notice (Notice of Opportunity to Make Oral or Written Limited Appearance Statements) (June 26, 2007), 72 Fed. Reg. 36,516 (July 3, 2007); Order (Regarding Questions to Focus on in Oral Argument; Timing of Oral Argument) (June 29, 2007) (unpublished) [hereinafter 6/29/07 Order (Regarding Questions)].

¹² *See* Transcript at 1-186 (July 17, 2007) [hereinafter "Tr."].

members regarding authorization of NCWARN and NIRS to represent them in this proceeding,¹³ and a motion to stay,¹⁴ to which the Applicant and NRC Staff have responded.¹⁵

III. Board Ruling on Standing of Petitioner to Participate in Proceeding

A petitioner's standing, or right to participate in a Commission licensing proceeding, is derived from section 189a of the Atomic Energy Act (AEA), which requires the NRC to provide a hearing "upon the request of any person whose interest may be affected by the proceeding."¹⁶

The Commission has implemented this requirement in its regulations at 10 C.F.R.

§ 2.309(d)(1).¹⁷

When determining whether a petitioner has established the necessary "interest" under Commission rules, licensing boards are directed by Commission precedent to look to judicial concepts of standing for guidance.¹⁸ Under this authority, in order to qualify for standing

¹³ Supplemental Declarations by Petitioners' Members (July 23, 2007) [hereinafter Supplemental Declarations].

¹⁴ Petitioners' Motion to Stay the Proceedings (July 20, 2007) [hereinafter Motion to Stay].

¹⁵ [CP&L's] Response in Opposition to NCWARN and NIRS Motion for Stay of Proceedings (July 20, 2007) [hereinafter Applicant Response to Motion to Stay]; NRC Staff Response to and Opposition to Motion to Stay the Proceedings (July 20, 2007) [hereinafter Staff Response to Motion for Stay]; see Tr. at 183.

¹⁶ 42 U.S.C. § 2239(a)(1)(A) (2000).

¹⁷ 10 C.F.R. § 2.309(d)(1) provides in relevant part that the Board shall consider three factors when deciding whether to grant standing to a petitioner: the nature of the petitioner's right under the AEA to be made a party to the proceeding; the nature and extent of the petitioner's property, financial, or other interest in the proceeding; and the possible effect of any order that may be entered in the proceeding on the petitioner's interest. 10 C.F.R. § 2.309(d)(1)(ii)-(iv). The provisions of 10 C.F.R. § 2.309 were formerly found at 10 C.F.R. § 2.714, prior to a major revision of the Commission's procedural rules for adjudications in 2004; thus, case law interpreting the prior section remains relevant. See Changes to Adjudicatory Process, 69 Fed. Reg. 2182 (Jan. 14, 2004).

¹⁸ See, e.g., *Yankee Atomic Elec. Co.* (Yankee Nuclear Power Station), CLI-98-21, 48 NRC 185, 195 (1998); *Quivira Mining Co.* (Ambrosia Lake Facility, Grants, New Mexico),

(continued...)

a petitioner must “allege [1] a concrete and particularized injury that is (2) fairly traceable to the challenged action and (3) likely to be redressed by a favorable decision” — three criteria commonly referred to as “injury in fact,’ causality, and redressability.”¹⁹ The requisite injury may be either actual or threatened,²⁰ but must arguably lie within the “zone of interests” protected by the statutes governing the proceeding — here, either the AEA or the National Environmental Policy Act (NEPA).²¹ Additionally, Commission case law has established a “proximity presumption,” whereby an individual may satisfy these standing requirements by demonstrating that his or her residence or activities are within the geographical area that might be affected by an accidental release of fission products, and in proceedings involving nuclear power plants this area has been defined as being within a 50-mile radius of such a plant.²²

An organization that wishes to establish standing to intervene may do so by demonstrating either organizational standing or representational standing. To establish organizational standing it must show that the interests of the organization will be harmed by the proposed licensing action, while an organization seeking representational standing must demonstrate that

¹⁸(...continued)

CLI-98-11, 48 NRC 1, 5-6 (1998); *Georgia Institute of Technology* (Georgia Tech Research Reactor, Atlanta, Georgia), CLI-95-12, 42 NRC 111, 115 (1995).

¹⁹ *Yankee*, CLI-98-21, 48 NRC at 195 (citing *Steel Co. v. Citizens for a Better Env't*, 523 U.S. 83, 102-04 (1998); *Kelley v. Selin*, 42 F.3d 1501, 1508 (6th Cir. 1995)).

²⁰ *See id.* at 195 (citing *Wilderness Soc’y v. Griles*, 824 F.2d 4, 11 (D.C. Cir. 1987)).

²¹ *Id.* at 195-196 (citing *Ambrosia Lake Facility*, CLI-98-11, 48 NRC at 6).

²² *See Florida Power & Light Co.* (St. Lucie Nuclear Power Plant, Units 1 and 2), CLI-89-21, 30 NRC 325, 329 (1989); *Virginia Elec. and Power Co.* (North Anna Nuclear Power Station, Units 1 and 2), ALAB-522, 9 NRC 54, 56 (1979) (“close proximity [to a facility] has always been deemed to be enough, standing alone, to establish the requisite interest” to confer standing); *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plants, Units 3 and 4), LBP-01-06, 53 NRC 138, 146-50 (2001).

the interests of at least one of its members will be so harmed.²³ To establish such representational standing, an organization must: (1) show that at least one of its members may be affected by the licensing action and, accordingly, would have standing to sue in his or her own right; (2) identify that member by name and address; and (3) show that the organization is authorized to request a hearing on behalf of that member.²⁴

Finally, in evaluating and ruling on a petitioner's standing to intervene in an NRC adjudicatory proceeding, we are to "construe the petition in favor of the petitioner."²⁵

Petitioners assert representational standing on behalf of seven individuals, each of whom provided affidavits stating their name, occupation, address, proximity to the facility, concerns regarding the Shearon Harris license renewal, and affiliation with either NCWARN or NIRS (six from NCWARN and one from NIRS). Each of the seven affiants lives within fifteen miles of the plant: two within seven miles, four within eight miles, and one within fifteen miles.²⁶

Both Applicant and the NRC Staff argue that Petitioners fail to establish representational standing because they have not "demonstrate[d] that they are authorized to represent the members whose affidavits are attached to the Petition."²⁷ According to Applicant and the Staff, the affidavits must specifically "state that [the affiants] authorize Petitioners to represent them in

²³ See *Yankee*, CLI-98-21, 48 NRC at 195.

²⁴ See *GPU Nuclear, Inc. (Oyster Creek Nuclear Generating Station)*, CLI-00-6, 51 NRC 193, 202 (2000).

²⁵ *Georgia Tech Research Reactor*, CLI-95-12, 42 NRC at 115.

²⁶ See Petition at 5-7; Attachment 1 to Petition, Declarations for NCWARN; Attachment 2 to Petition, Declaration for NIRS.

²⁷ Applicant's Answer at 2-3; see also Staff Response at 6 ("the Declarations fail to support representational standing . . . by failing to authorize representation in the license renewal proceeding").

this proceeding.”²⁸ In addition, Applicant asserts that Petitioners fail to establish organizational standing because they do not “allege a particularized injury that is fairly traceable to the license renewal, nor have they demonstrated how a decision regarding the license renewal would redress those concerns.”²⁹

In their Reply Petitioners assert, in response to the NRC Staff and Applicant’s argument regarding representational standing, that the Petition

[o]n its face . . . clearly states that the Petitioners bring this action on behalf of their members, and that those members, including the affiants, would be significantly and adversely impacted by the relicensing of the [Shearon Harris Nuclear Power Plant]. These statements clearly demonstrate that these members have authorized the organization to represent his or her interests and meets the requirements for representational standing.³⁰

If, however, Petitioners assert, the term “‘authorized’ is deemed to be a mandatory word for standing in this proceeding, then [they] request leave to amend the[ir] Petition to include it.”³¹

With respect to Applicant’s argument that Petitioners fail to establish organizational standing, Petitioners contend that they satisfy each of the required criteria: injury in fact, causality, and redressability. Regarding injury, they state the members of NCWARN and NIRS live within fifteen miles of the Shearon Harris plant. Regarding causality, they assert that continued operation of the plant “while it is out of compliance with serious safety regulations, along with the inability for the affiants and all other members of the public, to safely evacuate them and their families, is directly traceable to the potential of serious accidents now and in the

²⁸ Applicant’s Answer at 3; *see also* Staff Response at 7 (“[t]he Declarations do not state that the Declarants have requested or authorized NIRS or NC WARN to represent them in this proceeding”).

²⁹ Applicant’s Answer at 3 n.1.

³⁰ Petitioners’ Reply at 3-4.

³¹ *Id.* at 3 n.3.

future[.]”³² Finally, regarding redressability, they aver that, “if Petitioners receive [a] favorable decision, and the plant is not relicensed, then the concerns by the affiants and Petitioners are directly addressed.”³³

We agree with Petitioners that it is implicit in their Petition and accompanying affidavits that the seven affiants are authorizing NCWARN and NIRS to represent their interests and participate in this proceeding on their behalf. By providing signed affidavits — which state their affiliation with either NCWARN or NIRS and their particular concerns relating to the Shearon Harris license renewal — it is clear that the affiants, each of whom live well within the 50-mile radius of the plant, are giving their assent to Petitioners’ representing their interests in this proceeding.

There is no support in either Commission or federal case law for the assertion put forth by Applicant and Staff that, in order to successfully demonstrate representational standing, the precise word “authorize” must appear in the supporting affidavits. Case law is clear that, while there must be “strict observance of the requirements governing intervention, in order that the adjudicatory process is invoked only by those persons who have real interests at stake and who seek resolution of concrete issues[,] . . . it is not necessary to the attainment of that goal that interested persons be rebuffed by the inflexible application of procedural requirements.”³⁴ Similarly, the federal courts have rejected the “approach that pleading is a game of skill in which one misstep by counsel may be decisive to the outcome, and accept the principle that the

³² *Id.* at 4.

³³ *Id.* at 4.

³⁴ *Virginia Elec. & Power Co.* (North Anna Power Station, Units 1 and 2), ALAB-146, 6 AEC 631, 633-34 (1973).

purpose of pleading is to facilitate a proper decision on the merits.”³⁵ Thus, while Petitioners would have been better served to include a precise statement of authorization, their failure to do so in this instance is not fatal to their claim of standing, and we find that Petitioners NCWARN and NIRS have demonstrated representational standing to intervene in this proceeding.³⁶

Even if, however, we were to conclude that such failure on the part of Petitioners renders their Petition defective, we find that such a defect is readily curable. In *Virginia Electric and Power Company*, the Appeal Board found that a petition, which “was not submitted under oath and did not state expressly the manner in which the petitioner’s interest would be affected by the proceeding,” was a defect that “may be readily curable.”³⁷ Here, the defect is far less severe in that all that is arguably missing from Petitioners’ initial pleading is the word “authorize,” an element they were able to provide quite readily after requesting and receiving the Board’s permission therefor.³⁸

³⁵ *Wilson v. Westinghouse Elec. Corp.*, 838 F.2d 286, 289-90 (8th Cir. 1988).

³⁶ Given our ruling finding representational standing on the part of Petitioners, we find it unnecessary to decide the issue of organizational standing.

³⁷ *Virginia Elec. & Power Co.*, ALAB-146, 6 AEC at 633; see also *U.S. Army* (Jefferson Proving Ground Site) (Feb. 24, 2000) (unpublished) (providing opportunity to cure defective hearing request that did not identify any member by name or address or indicate that any member authorized the particular organization to represent it).

³⁸ Tr. at 6-7; Supplemental Declarations.

IV. Standards for Admissibility of Contentions in License Renewal Proceedings

A. Regulatory Requirements on Contentions

As has previously been noted in a number of NRC adjudication proceedings,³⁹ to intervene in an NRC proceeding, a petitioner must, in addition to demonstrating standing, submit at least one contention meeting the requirements of 10 C.F.R. § 2.309(f)(1).⁴⁰ Failure of a contention to

³⁹ See, e.g., *Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), LBP-06-23, 64 NRC 257, 272-74 (2006), *aff'd* CLI-07-3, 65 NRC 13, *reconsid. denied*, CLI-07-13, 65 NRC 211 (2007); *PPL Susquehanna, LLC* (Susquehanna Steam Electric Station, Units 1 and 2), LBP-07-4, 65 NRC 281, 302-12 (2007). An Appendix to the *Pilgrim* decision provides a more detailed summary of relevant case law on contention admissibility than that found in this Memorandum and Order. See *Pilgrim*, LBP-06-23, 64 NRC at 351-59.

⁴⁰ See 10 C.F.R. § 2.309(a). 10 C.F.R. § 2.309(f)(1) states that:

(1) A request for hearing or petition for leave to intervene must set forth with particularity the contentions sought to be raised. For each contention, the request or petition must:

(i) Provide a specific statement of the issue of law or fact to be raised or controverted;

(ii) Provide a brief explanation of the basis for the contention;

(iii) Demonstrate that the issue raised in the contention is within the scope of the proceeding;

(iv) Demonstrate that the issue raised in the contention is material to the findings the NRC must make to support the action that is involved in the proceeding;

(v) Provide a concise statement of the alleged facts or expert opinions which support the requestor's/petitioner's position on the issue and on which the petitioner intends to rely at hearing, together with references to the specific sources and documents on which the requestor/petitioner intends to rely to support its position on the issue; and

(vi) Provide sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact. This information must include references to the specific portions of the application (including the applicant's environmental report and safety report) that the petitioner disputes and the supporting reasons for each dispute, or, if the petitioner believes that the application fails to contain information on a relevant matter as required by law, the identification of each failure and the supporting reasons for the petitioner's belief.

meet any of the requirements of § 2.309(f)(1) is grounds for its dismissal.⁴¹ Heightened standards for the admissibility of contentions originally came into being in 1989, when the Commission amended its rules to “raise the threshold for the admission of contentions.”⁴² The Commission has stated that the “contention rule is strict by design,” having been “toughened . . . in 1989 because in prior years ‘licensing boards had admitted and litigated numerous contentions that appeared to be based on little more than speculation.’”⁴³ More recent amendments to the NRC procedural rules, which went into effect in 2004,⁴⁴ put into place various additional restrictions⁴⁵ and changes to provisions relating to the hearing process.⁴⁶ They do, however, contain essentially the same substantive admissibility standards for contentions.

⁴¹ See *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-99-10, 49 NRC 318, 325 (1999); *Arizona Pub. Serv. Co.* (Palo Verde Nuclear Generating Station, Units 1, 2, and 3), CLI-91-12, 34 NRC 149, 155-56 (1991).

⁴² Rules of Practice for Domestic Licensing Proceedings – Procedural Changes in the Hearing Process, 54 Fed. Reg. 33,168, 33,168 (Aug. 11, 1989); see also *Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 334 (1999).

⁴³ *Dominion Nuclear Conn., Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 NRC 349, 358 (2001) (quoting *Oconee*, CLI-99-11, 49 NRC at 334).

⁴⁴ See 69 Fed. Reg. at 2182.

⁴⁵ For example, the current version of the rules no longer incorporates provisions formerly found at 10 C.F.R. §§ 2.714(a)(3), (b)(1), which permitted the supplementation of petitions and the filing of contentions after the original filing of petitions. Under the current rules, contentions must be filed with the original petition within 60 days of notice of the proceeding in the *Federal Register*, unless a longer period is therein specified, an extension is granted, see *Louisiana Energy Services, L.P.* (National Enrichment Facility), CLI-04-25, 60 NRC 223, 224 (2004), *reconsid. denied*, CLI-04-35, 60 NRC 619, 625 (2004); 69 Fed. Reg. at 2200; or the contentions meet certain criteria for late-filed or new contentions based on information that is available only at a later time, see 10 C.F.R. §§ 2.309(b)(3)(iii), (c), (f)(2).

⁴⁶ In this connection we note that a challenge to the new rules by several public interest groups was rejected in the case of *Citizens Awareness Network, Inc. v. NRC [CAN v. NRC]*, 391 F.3d 338 (1st Cir. 2004), on the basis that the new procedures “comply with the relevant provisions of the [Federal Administrative Procedure Act (APA)] and that the Commission has furnished an adequate explanation for the changes.” *Id.* at 343; see *id.* at 351, 355.

The Commission has explained that the “strict contention rule serves multiple interests.”⁴⁷

These include the following (quoted in list form):

First, it focuses the hearing process on real disputes susceptible of resolution in an adjudication. For example, a petitioner may not demand an adjudicatory hearing to attack generic NRC requirements or regulations, or to express generalized grievances about NRC policies.

Second, the rule’s requirement of detailed pleadings puts other parties in the proceeding on notice of the Petitioners’ specific grievances and thus gives them a good idea of the claims they will be either supporting or opposing.

Finally, the rule helps to ensure that full adjudicatory hearings are triggered only by those able to proffer at least some minimal factual and legal foundation in support of their contentions.⁴⁸

In its Statement of Consideration adopting the most recent revision of the rules, the Commission reiterated the same principles that were previously applicable; namely, that “[t]he threshold standard is necessary to ensure that hearings cover only genuine and pertinent issues of concern and that the issues are framed and supported concisely enough at the outset to ensure that the proceedings are effective and focused on real, concrete issues.”⁴⁹ Additional guidance with respect to each of the requirements of subsections (i) through (vi) of § 2.309(f)(1) is found in NRC case law, familiarity with which can be significant to the matter of whether a petitioner’s contention will be admitted or denied.

Because our rulings on the contentions submitted by Petitioners rest on subsections (iii), (iv), and (vi) of 10 C.F.R. § 2.309(f)(1), we focus in this section of our Memorandum on some of the guidance relating to these provisions to be found in relevant NRC case law. Under subsection (iii), a contention must allege facts “sufficient to establish that it falls directly within

⁴⁷ *Oconee*, CLI-99-11, 49 NRC at 334.

⁴⁸ *Id.* (citations omitted).

⁴⁹ 69 Fed. Reg. at 2189-90.

the scope of [a proceeding],”⁵⁰ and is not cognizable unless it is material to matters that fall within the scope of the proceeding for which the licensing board has been delegated jurisdiction.⁵¹ (We discuss the scope of license renewal proceedings specifically, in section IV.B below.) Also, a contention that challenges any Commission rule is outside the scope of the proceeding because, absent a waiver, “no rule or regulation of the Commission . . . is subject to attack . . . in any adjudicatory proceeding.”⁵² Similarly, any contention that amounts to an attack on applicable statutory requirements must be rejected by a licensing board as outside the scope of the proceeding.⁵³ A petitioner may, however, within the adjudicatory context submit a request for waiver of a rule under 10 C.F.R. § 2.335, and outside the adjudicatory context file a petition for rulemaking under 10 C.F.R. § 2.802 or a request that the NRC Staff take enforcement action under 10 C.F.R. § 2.206.

Under 10 C.F.R. § 2.309(f)(1)(iv), a petitioner must “[d]emonstrate that the issue raised in the contention is material to the findings the NRC must make to support the action that is involved in the proceeding,” and the standards defining the “findings the NRC must make to support” a license renewal are set forth at 10 C.F.R. § 54.29 (which we discuss in our ruling below on Contention TC-1).

⁵⁰ *Arizona Pub. Serv. Co.* (Palo Verde Nuclear Generating Station, Units 1, 2, and 3), LBP-91-19, 33 NRC 397, 412 (1991), *rev’d in part on other grounds*, CLI-91-12, 34 NRC 149 (1991).

⁵¹ *See Duke Power Co.* (Catawba Nuclear Station, Units 1 and 2), ALAB-825, 22 NRC 785, 790-91 (1985); *Pub. Serv. Co. of Indiana* (Marble Hill Nuclear Generating Station, Units 1 and 2), ALAB-316, 3 NRC 167, 170-71 (1976); *see also Commonwealth Edison Co.* (Zion Station, Units 1 and 2), ALAB-616, 12 NRC 419, 426-27 (1980); *Commonwealth Edison Co.* (Carroll County Site), ALAB-601, 12 NRC 18, 24 (1980).

⁵² 10 C.F.R. § 2.335(a).

⁵³ *Philadelphia Elec. Co.* (Peach Bottom Atomic Power Station, Units 2 and 3), ALAB-216, 8 AEC 13, 20 (1974).

On the requirement of 10 C.F.R. § 2.309(f)(1)(vi) that a petitioner “provide sufficient information to show . . . a genuine dispute . . . with the applicant . . . on a material issue of law or fact,” the Commission has stated that the petitioner must “read the pertinent portions of the license application, including the Safety Analysis Report and the Environmental Report, state the applicant’s position and the petitioner’s opposing view,” and explain why it disagrees with the applicant.⁵⁴ If a petitioner does not believe these materials address a relevant issue, the petitioner is to “explain why the application is deficient.”⁵⁵ A contention that does not directly controvert a position taken by the applicant in the application is subject to dismissal.⁵⁶ For example, an allegation that some aspect of a license application is “inadequate” or “unacceptable” does not give rise to a genuine dispute unless it is supported by facts and a reasoned statement of why the application is unacceptable in some material respect.⁵⁷

In addition, the requirements at 10 C.F.R. § 2.309(f)(1)(iv), (vi) are related to the “scope” requirement of 10 C.F.R. § 2.309(f)(1)(iii), because if an issue is not within the scope of a proceeding, then it is also necessarily not material, either legally or factually, at the contention admissibility stage of the proceeding.

⁵⁴ 54 Fed. Reg. at 33,170; *Millstone*, CLI-01-24, 54 NRC at 358.

⁵⁵ 54 Fed. Reg. at 33,170; *Palo Verde*, CLI-91-12, 34 NRC at 156.

⁵⁶ See *Texas Utils. Elec. Co.* (Comanche Peak Steam Electric Station, Unit 2), LBP-92-37, 36 NRC 370, 384 (1992).

⁵⁷ See *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), LBP-90-16, 31 NRC 509, 521 & n.12 (1990).

B. Scope of Subjects Admissible in License Renewal Proceedings

As noted in previous NRC proceedings,⁵⁸ Commission regulations and case law address in some detail the scope of license renewal proceedings, which generally concern requests to renew 40-year reactor operating licenses for additional 20-year terms.⁵⁹ The regulatory authority relating to license renewal is found at 10 C.F.R. Parts 51 and 54. Part 54 concerns the “Requirements for Renewal of Operating Licenses for Nuclear Power Plants,” and addresses safety-related issues in license renewal proceedings. Part 51, concerning “Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions,” addresses, among other things, the environmental aspects of license renewal. The Commission has interpreted these provisions in various adjudicatory proceedings, probably most extensively in a decision in the 2001 *Turkey Point* proceeding.⁶⁰

⁵⁸ See, e.g., *Pilgrim*, LBP-06-23, 64 NRC at 274-80.

⁵⁹ 10 C.F.R. § 54.31(b) provides that:

[a] renewed license will be issued for a fixed period of time, which is the sum of the additional amount of time beyond the expiration of the operating license (not to exceed 20 years) that is requested in a renewal application plus the remaining number of years on the operating license currently in effect. The term of any renewed license may not exceed 40 years.

10 C.F.R. § 50.51(a) states in relevant part that “[e]ach [original] license will be issued for a fixed period of time to be specified in the license but in no case to exceed 40 years from date of issuance.”

⁶⁰ See *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 6-13 (2001); see also *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2, Catawba Nuclear Station, Units 1 and 2), CLI-02-26, 56 NRC 358, 363-65 (2002); *Dominion Nuclear Conn., Inc.* (Millstone Nuclear Power Station, Units 2 and 3), LBP-04-15, 60 NRC 81, 90, *aff'd*, CLI-04-36, 60 NRC 631 (2004); *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-00-23, 52 NRC 327, 329 (2000); *Baltimore Gas & Elec. Co.* (Calvert Cliffs Nuclear Power Plant, Units 1 and 2), CLI-98-14, 48 NRC 39, 41, *motion to vacate denied*, CLI-98-15, 48 NRC 45 (1998); *Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2 and 3), CLI-98-17, 48 NRC 123, 125 (1998).

1. Safety-Related Issues in License Renewal Proceedings

Various sections of Part 54 speak to the scope of safety-related issues in license renewal proceedings. First, 10 C.F.R. § 54.4, titled “Scope,” specifies the plant systems, structures, and components that are within the ambit of Part 54.⁶¹ Sections 54.3 (containing definitions), 54.21 (addressing technical information to be included in an application and further identifying relevant structures and components), and 54.29 (stating the “Standards for issuance of a renewed license”) provide additional definition of what is encompassed within a license renewal review, which considers aging-management issues and some “time-limited aging analyses” that are associated with the functions of relevant plant systems, structures, and components.⁶² Applicants must “demonstrate how their programs will be effective in managing the effects of

⁶¹ 10 C.F.R. § 54.4(a) describes those “systems, structures, and components” that are within scope as:

- (1) Safety-related systems, structures, and components which are those relied upon to remain functional during and following design-basis events (as defined in 10 CFR 50.49(b)(1)) to ensure the following functions--
 - (i) The integrity of the reactor coolant pressure boundary;
 - (ii) The capability to shut down the reactor and maintain it in a safe shutdown condition; or
 - (iii) The capability to prevent or mitigate the consequences of accidents which could result in potential offsite exposures comparable to those referred to in § 50.34(a)(1), § 50.67(b)(2), or § 100.11 of this chapter, as applicable.
- (2) All nonsafety-related systems, structures, and components whose failure could prevent satisfactory accomplishment of any of the functions identified in paragraphs (a)(1)(i), (ii), or (iii) of this section.
- (3) All systems, structures, and components relied on in safety analyses or plant evaluations to perform a function that demonstrates compliance with the Commission's regulations for fire protection (10 CFR 50.48), environmental qualification (10 CFR 50.49), pressurized thermal shock (10 CFR 50.61), anticipated transients without scram (10 CFR 50.62), and station blackout (10 CFR 50.63).

⁶² See Final Rule, Nuclear Power Plant License Renewal; Revisions, 60 Fed. Reg. 22,461, 22,463 (May 8, 1995).

aging during the proposed period of extended operation,” at a “detailed . . . ‘component and structure level,’ rather than at a more generalized ‘system level.’”⁶³

The Commission in *Turkey Point* stated that, in developing 10 C.F.R. Part 54 beginning in the 1980s, it sought “to develop a process that would be both efficient, avoiding duplicative assessments where possible, and effective, allowing the NRC Staff to focus its resources on the most significant safety concerns at issue during the renewal term.”⁶⁴ Noting that the “issues and concerns involved in an extended 20 years of operation are not identical to the issues reviewed when a reactor facility is first built and licensed,” the Commission found that requiring a full reassessment of safety issues that were “thoroughly reviewed when the facility was first licensed” and continue to be “routinely monitored and assessed by ongoing agency oversight and agency-mandated licensee programs” would be “both unnecessary and wasteful.”⁶⁵ Nor did the Commission “believe it necessary or appropriate to throw open the full gamut of provisions in a plant’s current licensing basis to re-analysis during the license renewal review.”⁶⁶

⁶³ *Turkey Point*, CLI-01-17, 54 NRC at 8 (quoting 60 Fed. Reg. at 22,462).

⁶⁴ *Id.* at 7.

⁶⁵ *Id.*

⁶⁶ *Id.* at 9. “Current licensing basis” (CLB) is defined as follows at 10 C.F.R. § 54.3:

Current licensing basis (CLB) is the set of NRC requirements applicable to a specific plant and a licensee’s written commitments for ensuring compliance with and operation within applicable NRC requirements and the plant-specific design basis (including all modifications and additions to such commitments over the life of the license) that are docketed and in effect. The CLB includes the NRC regulations contained in 10 CFR Parts 2, 19, 20, 21, 26, 30, 40, 50, 51, 54, 55, 70, 72, 73, 100 and appendices thereto; orders; license conditions; exemptions; and technical specifications. It also includes the plant-specific design-basis information defined in 10 CFR 50.2 as documented in the most recent final safety analysis report (FSAR) as required by 10 CFR 50.71 and the licensee’s commitments remaining in effect that were made in docketed licensing correspondence such as licensee responses to NRC bulletins, generic letters, and enforcement actions, as well as licensee commitments documented in NRC

(continued...)

The Commission chose, rather, to focus the NRC license renewal safety review “upon those potential detrimental effects of aging that are not routinely addressed by ongoing regulatory oversight programs,” which it considered “the most significant overall safety concern posed by extended reactor operation.”⁶⁷ The Commission in *Turkey Point* described some of the “Detrimental Effects of Aging and Related Time-Limited Issues” as follows:

By its very nature, the aging of materials “becomes important principally during the period of extended operation beyond the initial 40-year license term,” particularly since the design of some components may have been based explicitly upon an assumed service life of 40 years. See [Final Rule, Nuclear Power Plant License Renewal, 56 Fed. Reg. 64,943, 64,946 (Dec. 13, 1991)]; see also [60 Fed. Reg. at 22,479]. Adverse aging effects can result from metal fatigue, erosion, corrosion, thermal and radiation embrittlement, microbiologically induced effects, creep, and shrinkage. Such age-related degradation can affect a number of reactor and auxiliary systems, including the reactor vessel, the reactor coolant system pressure boundary, steam generators, electrical cables, the pressurizer, heat exchangers, and the spent fuel pool. Indeed, a host of individual components and structures are at issue. See 10 C.F.R. § 54.21(a)(1)(i). Left unmitigated, the effects of aging can overstress equipment, unacceptably reduce safety margins, and lead to the loss of required plant functions, including the capability to shut down the reactor and maintain it in a shutdown condition, and to otherwise prevent or mitigate the consequences of accidents with a potential for offsite exposures.⁶⁸

The Commission has also described the focus of license renewal review as being on “plant systems, structures, and components for which current [regulatory] activities and requirements

⁶⁶(...continued)
safety evaluations or licensee event reports.

The Commission has also described the CLB concept in its *Turkey Point* decision, as follows:

“[CLB] is] a term of art comprehending the various Commission requirements applicable to a specific plant that are in effect at the time of the license renewal application. . . . The [CLB] represents an “evolving set of requirements and commitments for a specific plant that are modified as necessary over the life of a plant to ensure continuation of an adequate level of safety.” 60 Fed. Reg. at 22,473. It is effectively addressed and maintained by ongoing agency oversight, review, and enforcement.

Turkey Point, CLI-01-17, 54 NRC at 9; see also 10 C.F.R. §§ 54.29, 54.30.

⁶⁷ *Turkey Point*, CLI-01-17, 54 NRC at 7.

⁶⁸ *Id.* at 7-8.

may not be sufficient to manage the effects of aging in the period of extended operation.”⁶⁹ An issue can be related to plant aging and still not warrant review at the time of a license renewal application, if the issue is “adequately dealt with by regulatory processes” on an ongoing basis.⁷⁰ For example, if a structure or component is already required to be replaced “at mandated, specified time periods,” it would fall outside the scope of license renewal review.⁷¹

Finally, the Commission has stated that “[a]djudicatory hearings in individual license renewal proceedings will share the same scope of issues as our NRC Staff review, for our hearing process (like our Staff’s review) necessarily examines only the questions our safety rules make pertinent.”⁷²

2. Environmental Issues in License Renewal Proceedings

Regulatory provisions relating to the environmental aspects of license renewal arise out of the requirement that NEPA places on Federal agencies to “include in every recommendation or report on . . . major Federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on [] the environmental impact of the proposed action.”⁷³ As has been noted by the Supreme Court, the “statutory requirement that a federal agency contemplating a major action prepare such an environmental impact statement [EIS] serves NEPA’s ‘action-forcing’ purpose in two important respects”:

It ensures that the agency, in reaching its decision, will have available, and will carefully consider, detailed information concerning significant environmental impacts; it also guarantees that the relevant information will be made available to the larger audience

⁶⁹ *Id.* at 10 (quoting 60 Fed. Reg. at 22,469) (alteration in original).

⁷⁰ *Id.* at 10 n.2.

⁷¹ *Id.*

⁷² *Id.* at 10.

⁷³ 42 U.S.C. § 4332(2)(C) (2000); see *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 348 (1989).

that may also play a role in both the decisionmaking process and the implementation of that decision.⁷⁴

10 C.F.R. Part 51 contains NRC's rules relating to and implementing relevant NEPA requirements, and § 51.20(a)(2) requires that the NRC Staff prepare an EIS for issuance or renewal of a nuclear reactor operating license. Other sections relating to license renewal include, most significantly, 10 C.F.R. §§ 51.53(c), 51.95(c), and 51.103(a)(5), and Appendix B to Subpart A.

Although the requirements of NEPA are directed to Federal agencies and thus the primary duties of NEPA fall on the NRC Staff in NRC proceedings,⁷⁵ the initial requirement to analyze the environmental impacts of an action, including license renewal, is directed to applicants under relevant NRC rules.⁷⁶ Accordingly, § 51.53(c) requires a license renewal applicant to submit with its application an environmental report (ER), which must "contain a description of the proposed action, including the applicant's plans to modify the facility or its administrative control procedures as described in accordance with § 54.21," and "describe in detail the

⁷⁴ *Robertson*, 490 U.S. at 349 (citations omitted). The Court also noted that "NEPA itself does not mandate particular results, but simply prescribes the necessary process. . . . If the adverse environmental effects of the proposed action are adequately identified and evaluated, the agency is not constrained by NEPA from deciding that other values outweigh the environmental costs." *Id.* at 350 (citations omitted). As the Court also observed, in the companion case of *Marsh v. Oregon Natural Resources Council*, 490 U.S. 360, 371 (1989), "by focusing Government and public attention on the environmental effects of proposed agency action," NEPA "ensures that the agency will not act on incomplete information, only to regret its decision after it is too late to correct."

⁷⁵ See, e.g., 10 C.F.R. § 51.70(b), which states among other things that "[t]he NRC staff will independently evaluate and be responsible for the reliability of all information used in the draft environmental impact statement."

⁷⁶ See 10 C.F.R. § 51.41.

modifications directly affecting the environment or affecting plant effluents that affect the environment.”⁷⁷

The ER is not required to contain analyses of environmental impacts identified as “Category 1,” or “generic,” issues in 10 C.F.R. Part 51, Subpart A, Appendix B, Table B-1.⁷⁸ The basis of this is the Commission’s 1996 “Generic Environmental Impact Statement for License Renewal of Nuclear Plants” (GEIS), adopted as required under 10 C.F.R. § 51.95(c). The GEIS is an extensive study of the potential environmental impacts of extending the operating licenses for nuclear power plants, which was published as NUREG-1437 and provides data supporting the table of Category 1 and 2 issues in Appendix B.⁷⁹ Issuance of the 1996 GEIS was part of an amendment of the requirements of Part 51 undertaken by the Commission to establish environmental review requirements for license renewals “that were both efficient and more effectively focused.”⁸⁰

Issues on which the Commission found that it could draw “generic conclusions applicable to all existing nuclear power plants, or to a specific subgroup of plants,” were, as indicated above, identified as “Category 1” issues.⁸¹ This categorization was based on the Commission’s conclusion that these issues involve “environmental effects that are essentially similar for all plants,” and thus they “need not be assessed repeatedly on a site-specific basis,

⁷⁷ 10 C.F.R. § 51.53(c)(2); *see id.* § 51.53(c)(1).

⁷⁸ *See* 10 C.F.R. § 51.53(c)(3)(i).

⁷⁹ *See* NUREG-1437, Generic Environmental Impact Statement for License Renewal of Nuclear Plants (May 1996) [hereinafter GEIS]; Final Rule, Environmental Review for Renewal of Nuclear Power Plant Operating Licenses, 61 Fed. Reg. 28,467 (June 5, 1996), *amended by* 61 Fed. Reg. 66,537 (Dec. 18, 1996); 10 C.F.R. Pt. 51, Subpt. A, App. B n.1.

⁸⁰ *Turkey Point*, CLI-01-17, 54 NRC at 11.

⁸¹ *Id.* at 11 (citing 10 C.F.R. Pt. 51, Subpt. A, App. B).

plant-by-plant.”⁸² Thus, under 10 C.F.R. § 51.53(c)(3)(i), license renewal applicants may in their site-specific ERs refer to and adopt the generic environmental impact findings found in Appendix B, Table B-1, for all Category 1 issues.⁸³

Applicants must, however, address environmental issues for which the Commission was not able to make generic environmental findings.⁸⁴ An ER must “contain analyses of the environmental impacts of the proposed action, including the impacts of refurbishment activities, if any, associated with license renewal and the impacts of operation during the renewal term,” for those issues listed at 10 C.F.R. § 51.53(c)(3)(ii) and identified as “Category 2,” or “plant specific,” issues in Table B-1.⁸⁵ These issues are characterized by the Commission as involving environmental impact severity levels that “might differ significantly from one plant to another,” or impacts for which additional plant-specific mitigation measures should be considered.⁸⁶ For example, the “impact of extended operation on endangered or threatened species varies from one location to another,” according to the Commission, and is thus included

⁸² *Id.* at 11.

⁸³ Even though a matter would normally fall within a Category 1 issue, ERs are also required to contain “any new and significant information regarding the environmental impacts of license renewal of which the applicant is aware,” under 10 C.F.R. § 51.53(c)(3)(iv). The Commission has, however, ruled that such information is not a proper subject for a contention, absent a waiver of the rule at 10 C.F.R. § 51.53(c)(3)(i) that Category 1 issues need not be addressed in a license renewal. See *Turkey Point*, CLI-01-17, 54 NRC at 12; *Pilgrim*, LBP-06-23, 64 NRC at 288, 294-300; *Entergy Nuclear Vermont Yankee, LLC, and Entergy Nuclear Operations, Inc.* (Vermont Yankee Nuclear Power Station), LBP-06-20, 64 NRC 131, 155-59 (2006), *aff’d*, CLI-07-3, 65 NRC 13, *reconsid. denied*, CLI-07-13, 65 NRC 211 (2007). The *Pilgrim* and *Vermont Yankee* decisions have been appealed to the United States Court of Appeals for the First Circuit in *Commonwealth of Massachusetts v. NRC*, Docket Nos. 07-1482 and 07-1493 (1st Cir.).

⁸⁴ *Turkey Point*, CLI-01-17, 54 NRC at 11 (citing 10 C.F.R. Pt. 51, Subpt. A, App. B).

⁸⁵ 10 C.F.R. § 51.53(c)(3)(ii).

⁸⁶ *Turkey Point*, CLI-01-17, 54 NRC at 11.

within Category 2.⁸⁷ Another example is the requirement that “alternatives to mitigate severe accidents must be considered for all plants that have not [previously] considered such alternatives.”⁸⁸ Again, although the initial requirement falls upon an applicant, the ultimate responsibility lies with the NRC Staff, who must address these issues in a Supplemental Environmental Impact Statement (SEIS)⁸⁹ that is specific to the particular site involved and provides the Staff’s independent assessment of the Applicant’s ER.⁹⁰

Finally, § 51.103 defines the requirements for the “record of decision” relating to any license renewal application, including the standard that the Commission, in making such a decision pursuant to Part 54, “shall determine whether or not the adverse environmental impacts of license renewal are so great that preserving the option of license renewal for energy planning decisionmakers would be unreasonable.”⁹¹

V. Analysis and Rulings on Petitioners’ Contentions

With the preceding context regarding contention admissibility requirements and license renewal scope principles in mind, we turn now to the Petitioners’ contentions, discussing each in turn. While some raise questions of interest in other contexts, and one involves issues that

⁸⁷ *Id.* at 12.

⁸⁸ 10 C.F.R. Pt. 51, Subpt. A, App. B, Table B-1 (Postulated Accidents); see 10 C.F.R. § 51.53(c)(3)(ii)(L). This requirement arises out of “NEPA’s demand that an agency prepare a detailed statement on ‘any adverse environmental effects which cannot be avoided should the proposal be implemented,’ 42 U.S.C. § 4332(C)(ii),” implicit in which “is an understanding that the EIS will discuss the extent to which adverse effects can be avoided.” *Robertson*, 490 U.S. at 351-52. The basis for the requirement is that “omission of a reasonably complete discussion of possible mitigation measures would undermine the ‘action-forcing’ function of NEPA. Without such a discussion, neither the agency nor other interested groups or individuals can properly evaluate the severity of the adverse effects.” *Id.* at 352.

⁸⁹ See 10 C.F.R. § 51.95(c).

⁹⁰ See *Turkey Point*, CLI-01-17, 54 NRC at 12 (citing 10 C.F.R. §§ 51.70, 51.73–.74).

⁹¹ 10 C.F.R. § 51.103(a)(5).

may warrant further action in the future, none meets all of the admissibility requirements discussed in Section IV *supra*. Accordingly, as we explain below, all must be denied.

A. Technical Contention T-1 [TC-1]: Noncompliance with Fire Protection Requirements

. Petitioners in their first contention state:

Given that the [Shearon Harris Nuclear Power Plant] has been out of compliance since at least 1992 with requirements to maintain the post-fire safe shutdown systems of the reactor that minimize the probability and effects of fires and explosions as required in its Current License Basis and is not expected to come into compliance until approximately 2015 or later, extending into the license renewal period, and given that in the event of a significant fire, continued non-compliance can lead to the loss of the operators' ability to achieve and maintain hot standby/shutdown conditions further resulting in significant accidental release of radiation and posing a severe threat to public health and safety, it is therefore imprudent and improper to even consider extending the operating license for the [plant] for an additional 20 years until the plant comes into full compliance with all relevant fire protection regulations.⁹²

1. Petitioners' Basis for Contention TC-1

In support of this contention Petitioners emphasize the risks of and from a fire at a nuclear power plant, citing an NRC report for the statement that "based on plant operating experiences over the last 20 years . . . typical nuclear power plants will have three to four significant fires over their operating lifetime."⁹³ According to the report, fires are "significant contributor[s] to the overall core damage frequency," among other things because, "like many other external events, a fire event not only acts as an initiator but can also compromise mitigating systems because of its common-cause effect[]."⁹⁴

Citing the Application at Section 2.3.3.31, Petitioners note that "certain types of fire barriers" are described therein, and assert that these "include extensive applications of inoperable fire

⁹² Petition at 18-19.

⁹³ *Id.* at 19 (quoting NUREG-1150, Vol. 2, App. C, Severe Accident Risks: An Assessment for Five U.S. Nuclear Power Plants, at C-128 (Oct. 1990) (internal quotation marks omitted)).

⁹⁴ NUREG-1150, Vol. 2, App. C at C-128; see *also* Petition at 19.

barrier systems consisting of Thermo Lag, Hemyc and MT,” materials which “were originally designated for the fire protection of electrical cables and conduits vital to the post fire safe shutdown systems.”⁹⁵ Petitioners contend that “subsequent fire tests” have established that “these fire barrier systems do not provide the level of required fire protection on standardized time and temperature industry fire tests under ASTM [standard] E119.”⁹⁶ Petitioners argue that NRC regulations, including 10 C.F.R. Part 50, § 50.48; Appendix A, General Design Criterion 3; and Appendix R, § III.G, III.J, and III.O, “mandate that nuclear power station operators physically protect emergency backup electrical systems, such as power, control and instrumentation cables, that are used to remotely shut down the reactor from the control room,” in addition to physical protections tested under ASTM standards and modified as necessary to assure compliance.⁹⁷ Petitioners also cite NUREG-0800, Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants, § 9.5.1, in support of their argument on fire protection requirements and capacity to shut down the reactor.⁹⁸

Urging that “[o]ne of the basic principles in the relicensing of a nuclear power plant is that the plant is substantially in compliance with all relevant regulations,”⁹⁹ Petitioners argue that the

⁹⁵ Petition at 19-20.

⁹⁶ *Id.* at 20. The acronym ASTM arises out of its origin as the American Society for Testing and Materials. Various NRC regulatory documents refer to ASTM standards, including, *e.g.*, NUREG-0800, Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants, which refers to ASTM E-119 in Appendix I at I-245 and Appendix II at II-751.

⁹⁷ *Id.* at 20, 9-10.

⁹⁸ *Id.* at 20.

⁹⁹ Petition at 21. Petitioners cite the following Commission statement from its 1991 rulemaking on license renewal for the “basic principle” they rely on:

With the exception of age-related degradation unique to license renewal and possibly some few other issues related to safety only during extended operation,
(continued...)

“presumption that the regulatory system works is a rebuttable presumption” and that, as the plant at issue “has been out of compliance since 1992 . . . there is absolutely no reasonable assurance against cable and conduit fires and consequential impairment of the ability of the plant to safely operate, and in particular, to safely shutdown [sic] and maintain the reactor in emergency situations.”¹⁰⁰ In support of this argument, Petitioners cite a September 20, 2006, report prepared by themselves and others that sets forth a history and documentation of the plant’s noncompliance and failure to fulfill various promises to come into compliance with relevant fire protection requirements.¹⁰¹

Petitioners also refer to an enforcement petition that they and others submitted to the NRC pursuant to 10 C.F.R. § 2.206 (§ 2.206 Petition), seeking immediate shutdown of the plant, maximum fines for all violations, and investigation of the fire protection problems.¹⁰² Petitioners agreed with an April 2, 2007, Proposed Director’s Decision to the extent that it concluded that

⁹⁹(...continued)

the regulatory process is adequate to ensure that the licensing bases of all currently operating plants provide and maintain an acceptable level of safety for operation so that operation will not be inimical to public health and safety or common defense and security.

Id. at 8 (citing 56 Fed. Reg. at 64,946).

¹⁰⁰ *Id.* at 21.

¹⁰¹ *Id.* at 21-22 (citing “Delaying with Fire: The Shearon Harris Nuclear Plant and 14 Years of Fire Safety Violations” (Sept. 20, 2006)).

¹⁰² *Id.* at 22. Petitioners also refer to, and incorporate by reference, various documents relating to the § 2.206 petition in support of this petition and contention, including the following (with their ADAMS accession numbers from the NRC document management system, “ADAMS,” available on NRC’s public website at www.nrc.gov): § 2.206 Petition, Accession Nos. ML062640550 and ML062830089; Transcript of Proceedings of Petition Review Board (Nov. 13, 2006) [hereinafter 11/13/06 Review Board Transcript], ML063210488; § 2.206 Petition Supplements, ML062980107, ML063200168, ML063450098, and ML070510497; *Carolina Power & Light Co.* (Shearon Harris Nuclear Power Plant, Unit 1) (Apr. 2, 2007) (“Proposed Director’s Decision”), ML070780537; and Petitioners’ Response to Proposed Director’s Decision, ML071230046.

the plant was indeed out of compliance with the fire regulations, but objected “to the Director’s proposed conclusion that the NRC staff was adequately enforcing these regulations.”¹⁰³ They expected that the Final Director’s Decision would be available by the time of any hearing in this proceeding, and it was in fact later issued, on June 13, 2007.¹⁰⁴

Referring to a November 13, 2006, Petition Review Board meeting on their § 2.206 Petition, Petitioners quote the following comments of NRC Nuclear Reactor Regulation Fire Protection Branch Chief Sunil Weerakkody:

This is Sunil Weerakkody. For Sharon [sic] Harris and all other plants that are transitioning to 805 [National Fire Protection Association or NFPA 805] we have a revised inspection procedure. And at a high level what I can say is, we have told inspectors to focus on the fire inspection infrastructure, like for example when inspectors go, you have the fire brigade, you have the suppression systems you know, and if the plant is transitioning to 805, in areas where we have basically said, our position is that they are not in compliance, we enable them to transition. In other words, there is no reason to go and reinspect things like operator manual actions where we believe that the licensee is not in compliance.¹⁰⁵

Petitioners argue that “the showing of noncompliance and lack of further inspection clearly rebuts any presumption that the plant is operating safely.”¹⁰⁶ They also note that Congressman David Price from the State of North Carolina has requested the Government Accountability Office to investigate the “same issues that are at the heart of this contention,” namely:

(1) the frequency and causes of recent fire emergencies at U.S. nuclear power plants; (2) the adequacy and acceptable duration of interim compensatory

¹⁰³ Petition at 22.

¹⁰⁴ *Id.* at 22 n.9; see also *Carolina Power & Light Co.* (Shearon Harris Nuclear Power Plant, Unit 1), DD-07-03 (June 13, 2007) [hereinafter Final Director’s Decision] (ADAMS Accession No. ML071500403).

¹⁰⁵ Petition at 23 (quoting 11/13/06 Review Board Transcript at 49).

¹⁰⁶ *Id.* at 23.

measures; and (3) whether the transition to risk-based fire safety standards has led to an over-reliance on such measures during the transition period.¹⁰⁷

Petitioners project that the results of this study will be available at any evidentiary hearing that might be held in this proceeding.¹⁰⁸

Asserting that CP&L “has relied on inoperable and inadequate fire safety systems for at least fifteen years at the [Shearon Harris plant] and has indicated that it may resolve some of the fire protection problems by 2015 or later,” Petitioners argue that this subjects people living in the vicinity of the plant to “severe and undue risks” and that therefore, “as a matter of law, the decision on the relicensing of the [plant] should be denied until the plant is fully in compliance with the fire regulations.”¹⁰⁹

Petitioners support all of their contentions including TC-1 with additional argument in an Introduction section of the Petition, as well as a section thereof entitled “Statutory and Regulatory Framework.”¹¹⁰ In their introduction, Petitioners observe that the AEA “prohibits the NRC from issuing a license to operate a nuclear power plant if it would be ‘inimical to the common defense and security or to the health and safety of the public.’”¹¹¹ In the “Framework” section, Petitioners concede that “the AEA does not set a safety standard for license renewal,” stating as well that the “Commission generally interprets the AEA to require that it ‘must have “reasonable assurance” that public health and safety are not endangered by its licensing

¹⁰⁷ *Id.* at 23-24 (citing Letter from Congressman David Price to David M. Walker, Comptroller General of the United States (May 11, 2007), Attachment 3 to Petition).

¹⁰⁸ *Id.* at 23 n.11.

¹⁰⁹ *Id.* at 24.

¹¹⁰ *Id.* at 2-5; 7-17.

¹¹¹ Petition at 2 (quoting 42 U.S.C. § 2133(d)).

actions.”¹¹² Recognizing that the Commission has determined that the “regulatory process” serves to “ensure that [plants’ CLBs] provide and maintain an acceptable level of safety for operation so that operation will not be inimical to public health and safety or common defense and security,”¹¹³ Petitioners note that “[t]hus, other than with respect to aging issues and issues that arise when significant new information becomes available, the NRC does not inquire into safety issues in the license renewal process but presumes that the current regulatory process is adequate.”¹¹⁴ As indicated above, however, Petitioners view this as a presumption that is “rebuttable if it is shown that the current regulatory process is not adequate to protect public health and safety or if the plant is not in compliance with the relevant regulations or provisions of its license,” and provide a timeline of events they argue “clearly shows that despite numerous notices by the NRC staff about the failures of fire barriers and the need to comply with the Section III.G.2. standards, [CP&L] has not done so.”¹¹⁵

2. Positions of Applicant and NRC Staff on Contention TC-1

Both the Applicant and NRC Staff view Contention TC-1 as inadmissible because it is outside the scope of this license renewal proceeding and fails to demonstrate a genuine dispute with the Application on a material issue of law or fact.¹¹⁶

Applicant argues that the contention is “beyond the scope of the proceeding because it does not relate to the potential effects of aging, which define the scope of the safety review in

¹¹² *Id.* at 8 (citing *Petition for Emergency and Remedial Action*, CLI-78-6, 7 NRC 400, 404 (1978) (citing *Power Reactor Development Co. v. Int’l Union of Elec., Radio and Mach. Workers, AFL-CIO*, 367 U.S. 396, 402 (1961))).

¹¹³ *Id.* (citing 56 Fed. Reg. at 64,946).

¹¹⁴ *Id.* at 8.

¹¹⁵ *Id.* at 8, 9.

¹¹⁶ Applicant’s Answer at 11-16; Staff Response at 14-17.

license renewal proceedings,”¹¹⁷ and that it instead concerns the plant’s current licensing basis.¹¹⁸ Further, Applicant argues, the contention is “not supported by a sufficient basis demonstrating a genuine dispute with the Application,” in that Petitioners fail to provide (1) “a ‘concise statement of the alleged facts or expert opinions’ supporting Contention [TC-1],” (2) “references to ‘specific sources and documents on which the requestor/petitioner intends to rely to support its position on the issue,’ as required by 10 C.F.R. § 2.309(f)(1)(i) and (v),” and (3) “‘the [technical] analyses and expert opinion’ or other information ‘showing why its bases support its contention.’”¹¹⁹

With respect to Petitioners’ contention and the Proposed Director’s Decision under 10 C.F.R. § 2.206, Applicant states that the proposed decision “in no way supports their claims” and in any event has been “superseded by a final Director’s Decision.”¹²⁰ “None of [Petitioners] documents reference or relate to any portion of the Application or explain how the Application is deficient,” insists Applicant, nor does Congressman Price’s letter “suggest[] any problem with the Application, or with Harris’ fire protection program.”¹²¹ Nor, Applicant argues, can Petitioners or this Board rely on a “potential future GAO Report,” the content of which is unknown.¹²²

¹¹⁷ Applicant’s Answer at 12 (citing *Millstone*, CLI-04-36, 60 NRC at 637); see *id.* at 12-13 (citing *Turkey Point*, CLI-01-17, 54 NRC at 7-8 (2001); *McGuire*, CLI-02-26, 56 NRC at 363).

¹¹⁸ *Id.* at 13 (citing 56 Fed. Reg. at 64,945-46; 60 Fed. Reg. at 22,473; *Turkey Point*, CLI-01-17, 54 NRC at 7-8).

¹¹⁹ *Id.* at 13-14 (alteration in original) (quoting *Georgia Institute of Technology* (Georgia Tech Research Reactor, Atlanta, Georgia), LBP-95-6, 41 NRC 281, 305, *vacated and remanded* CLI-95-10, 42 NRC 1 (1995)).

¹²⁰ *Id.* at 14 & n.7 (citing Proposed Director’s Decision; Final Director’s Decision).

¹²¹ *Id.* at 14.

¹²² *Id.* at 14 n.8 (citing *Millstone*, CLI-04-36, 60 NRC at 639).

Applicant asserts that Petitioners' § 2.206 Petition "involve[s] only the current licensing basis of Harris and Petitioners' attack on the Commission's fire protection regulations[,] how the NRC enforces those regulations," and "the Commission's approach to risk-based and performance-based fire protection."¹²³ Noting that the Final Director's Decision "rejects all of Petitioners' claims," Applicant argues that "Petitioners cannot attempt to collaterally attack the Final Director's Decision and re-litigate it in this proceeding," nor does this Licensing Board have jurisdiction to review it.¹²⁴ Moreover, Applicant urges, Petitioners have failed to point to specific portions of the Application "that are either deficient or do not comply with the Commission's regulations," or relate the content of their § 2.206 Petition to the Application.¹²⁵

Finally, Applicant suggests that Petitioners have not "asserted that the alleged non-compliance with fire protection regulations described in the 2.206 Petition (and rejected by the Acting Director) constitutes a genuine dispute of fact in regard to whether Harris' license should be renewed, as required by Commission case law."¹²⁶ Therefore, according to Applicant, (1) "Contention [TC-1] is not material to this proceeding"; (2) "the resolution of the alleged dispute between Petitioners and Licensee *would not make a difference in the outcome* of the license renewal proceeding"; (3) Petitioners "have not demonstrated fault with the Application

¹²³ Applicant's Answer at 14-15 & 15 n.9.

¹²⁴ *Id.* at 15 & n.11 (citing Final Director's Decision at 19; 10 C.F.R. § 2.206(c)).

¹²⁵ *Id.* at 15 (citing 10 C.F.R. § 2.309(f)(1)(vi); *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2, Catawba Nuclear Station, Units 1 and 2), LBP-02-4, 55 NRC 49, 80 (2002); *Millstone*, CLI-01-24, 54 NRC at 359-60).

¹²⁶ *Id.* at 15 (citing *Calvert Cliffs*, CLI-98-14, 48 NRC at 41; *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-98-7, 47 NRC 142, 180 (1998)).

supported by sufficient basis”; and (4) the contention “must be rejected” because “[a] ‘genuine dispute’ does not exist ‘with the applicant/licensee on a material issue of law or fact.’”¹²⁷

The NRC Staff, quoting the Petitioners’ characterizations of this contention as that “the [Shearon Harris plant] is currently not in compliance with fire protection regulations” and that the issues they raise in the contention are “the same” as those involved in their § 2.206 petition for enforcement action, urges that Petitioners’ own assessment demonstrates “that the contention pertains to compliance with fire protection regulations under current operations, rather than license renewal.”¹²⁸ Thus, Staff argues:

The Petition fails to demonstrate that the issue raised in the contention is within the scope of this license renewal proceeding; fails to demonstrate that the issue raised in the contention is material to the findings the NRC must make to support the license renewal action; and fails to provide sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact in this proceeding.¹²⁹

According to the Staff, the contention “is plainly outside the scope of the proceeding as it does not raise any aspect of the applicants’ aging management review,” and, “[i]n particular, it fails to show that current compliance with fire protection requirements is material to the findings the NRC must make for granting or denying license renewal.”¹³⁰

The Staff challenges Petitioners’ assertion that the “principle . . . that [a plant seeking relicensing] is substantially in compliance with all relevant regulations” is a “rebuttable presumption,” stating that “the Petitioners offer absolutely no case [or regulatory] authority” for such argument.¹³¹ In addition, Staff argues, “[t]o the extent the Petition argues that a

¹²⁷ *Id.* at 16 (quoting 10 C.F.R. § 2.309(f)(1)(vi)).

¹²⁸ Staff Response at 14 (internal quotation marks omitted) (quoting Petition at 3).

¹²⁹ *Id.*

¹³⁰ *Id.* (citing *Turkey Point*, CLI-01-17, 54 NRC at 10).

¹³¹ *Id.* at 15 (citing Petition at 21, 8).

'rebuttable presumption' exists, it is an impermissible challenge to the Commission's rules, and cannot be used to support a contention in license renewal."¹³²

Moreover, noting that the 1991 rulemaking was not the Commission's most recent statement on license renewal, Staff points out that the Commission did nonetheless then state explicitly that the license renewal rule "does not require submission of information relating to the adequacy of, or compliance with, the current licensing basis," and that in its later 1995 license renewal rulemaking it reaffirmed that "the conclusions . . . for the previous . . . rule remain valid" and that "special verification of CLB compliance in connection with the review of a license renewal application is unnecessary."¹³³

More specifically, Staff observes, the Commission stated in 1991 that "Section 54.29, which defines the standard for issuance of a renewed license, does not require a finding regarding the adequacy of, or compliance with, the plant's licensing basis."¹³⁴ Even though it believed this guidance was clear, Staff says the Commission "decided to improve the rule," narrowing § 54.29 to the findings to be made for issuance of a renewed license, and adding § 54.30 "to address the licensee's responsibilities for addressing safety matters under its current license that are not within the scope of the renewal review" and "minimize any possibility of misinterpreting the scope of the renewal."¹³⁵ Regarding compliance with a plant's current licensing basis, the Staff quotes the following language from the 1995 rulemaking:

The Commission does not contend that all reactors are in full compliance with their respective CLBs on a continuous basis. Rather, as discussed in the SOC for the previous rule, the regulatory process provides reasonable assurance that there is

¹³² *Id.* at 17 (citing 10 C.F.R. § 2.335(a)).

¹³³ *Id.* at 15-16 & n.21 (quoting 56 Fed. Reg. at 64,961; 60 Fed. Reg. at 22,463, 22,474).

¹³⁴ Staff Response at 16 (quoting 56 Fed. Reg. at 64,961).

¹³⁵ *Id.* at 16 (citing 60 Fed. Reg. at 22,482).

compliance with the CLB. The NRC conducts its inspection and enforcement activities under the presumption that non-compliances will occur.¹³⁶

Therefore, Staff insists, “any argument regarding the continued violation of the plant's current licensing basis is not material to the findings the NRC must make[, and] as such, the Petitioners’ argument fails the materiality requirement of 10 C.F.R. 2.309(f)(1)(iv).”¹³⁷

“Accordingly,” Staff argues, “inasmuch as Contention TC-1 addresses current compliance and fails to raise a matter that is properly within the scope of this license renewal proceeding, it is not admissible under license renewal and should be rejected.”¹³⁸

3. Reply of Petitioners on Contention TC -1

Petitioners in reply argue that this, like their other contentions, has a legal basis, as well as a “brief and concise explanation that is supported by competent evidence, readily available documents, alleged facts and/or proposed expert testimony,” none of which has been questioned.¹³⁹ In addition, they refer to a portion of the NRC Staff’s 2005 license renewal review plan, as follows:

In addition to the technical information required by 10 CFR 54.21, a license renewal application must contain general information (10 CFR 54.19), necessary technical specification changes (10 CFR 54.22), and environmental information (10 CFR 54.23). The application must be sufficiently detailed to permit the reviewers to determine (1) whether there is *reasonable assurance* that the activities authorized by the renewed license will continue to be conducted in accordance with the CLB and (2) whether any changes made to the plant's CLB to comply with 10 CFR Part 54 are in accord with the Atomic Energy Act of 1954 and NRC regulations.¹⁴⁰

¹³⁶ *Id.* at 16-17 (quoting 60 Fed. Reg. at 22,473-74).

¹³⁷ *Id.* at 16 (citing Petition at 10, 23, 24).

¹³⁸ *Id.* at 17.

¹³⁹ Petitioners’ Reply at 5-6.

¹⁴⁰ *Id.* at 7-8 (citing NUREG-1800, Rev. 1, Standard Review Plan for Review of License Renewal Application for Nuclear Power Plants (2005) [hereinafter NUREG-1800 or SRP]) (emphasis provided by Petitioner) (ADAMS Accession No. ML052110007).

From this, Petitioners draw the conclusion that the Staff's review "therefore needs to look at past noncompliances, present status and time lines to correct the problems."¹⁴¹ Petitioners assert that, in addition to the Shearon Harris plant not currently being in compliance with fire protection regulations, CP&L has provided "no demonstration or firm commitment that the SHNPP will come into compliance with these regulations in the near future, during the remainder of its present license period or during the license extension period."¹⁴²

On the materiality of this and their other contentions, Petitioners state:

Each of the contentions are [sic] material in that [they] go directly to the most crucial, and at the same time unresolved, threats to public health and safety from the continuing operation of the [Shearon Harris plant]. The NRC simply cannot make its ultimate determination that the [plant] can be operated safely and protective of public health and safety during license extension without resolving the issues raised in each contention.¹⁴³

Petitioners also ask to have the Final Director's Decision on their § 2.206 petition incorporated by reference into their current petition in this proceeding, arguing that the "findings of the Director are relevant to the relicensing as they show that the [Shearon Harris plant] has been out of compliance with the fire regulations since 1989 and that there is no time line for it to come into compliance."¹⁴⁴

4. Board Ruling on Contention TC-1

Although we find that this contention raises a significant issue, under relevant law we further find that we must deny its admission as outside the scope of this license renewal proceeding. The Commission in the *Turkey Point* proceeding interpreted its license renewal rules to the effect that a plant's CLB is "effectively addressed and maintained by ongoing agency oversight,

¹⁴¹ Petitioners' Reply at 8.

¹⁴² *Id.*

¹⁴³ *Id.* at 11.

¹⁴⁴ *Id.* at 12.

review and enforcement,” and that “[i]ssues . . . which already are the focus of ongoing regulatory processes — do not come within the NRC’s safety review at the license renewal stage.”¹⁴⁵ This case law constitutes binding precedent on this licensing board in any case that is not distinguishable from it, absent higher binding legal authority to the contrary.¹⁴⁶

We have learned in this proceeding that the Final Director’s Decision, which to our knowledge the Commission has not elected to review, requires the Applicant to file, by June 2008,¹⁴⁷ the application it has stated it intends to file,¹⁴⁸ to amend its license pursuant to 10 C.F.R. § 50.48(c)(2)(vii) (which permits licensees that “wish to use performance-based methods for [certain] fire protection program elements and minimum design requirements” to apply for license amendments to allow for such use in lieu of other fire protection requirements). We are also aware, as discussed *supra* at Section IV.B.1 of this Memorandum and as pointed out by Staff, that 10 C.F.R. § 54.29 sets the “Standards for issuance of a renewed license.”

Taking into account these two factors (the requirement to file a license amendment application by June 2008 and the standards set forth in § 54.29), we would observe that, if the application in question is filed timely as required in the Final Director’s Decision, this would, in keeping with the Commission’s language quoted above from *Turkey Point*, seem to allow for “ongoing agency oversight” and “regulatory processes” to address the question whether, as required under 10 C.F.R. § 54.29(a), the Applicant has identified “actions [to be taken that are related to aging] such that there is reasonable assurance that the activities authorized by the

¹⁴⁵ *Turkey Point*, CLI-01-17, 54 NRC at 9, 10; see also discussion *supra* Section IV.B.1.

¹⁴⁶ See *South Carolina Elec. & Gas, Co.* (Virgil C. Summer Nuclear Station, Unit 1), ALAB-710, 17 NRC 25, 28 (1983) (“licensing boards are bound to comply with [Commission adjudicatory decisions], whether they agree with them or not”).

¹⁴⁷ See Final Director’s Decision at 7.

¹⁴⁸ Tr. at 170-71.

renewed license will continue to be conducted in accordance with the CLB” — *provided* that the Staff in its license renewal review indeed looks at whether any new proposed fire protection program effectively addresses all relevant aging issues. This would seem to be a reasonable expectation, given that the Staff’s review of the current license renewal Application is projected to continue through 2008, and the Commission’s action on it into 2009.¹⁴⁹ In these circumstances, we find that Contention TC-1 is outside the scope of license renewal and thus does not meet the requirement of 10 C.F.R. § 2.309(f)(1)(iii).

Our denial of Contention TC-1 does not necessarily mean, however, that issues relating to fire protection at the Shearon Harris plant can never be addressed by Petitioners in an adjudication proceeding. The Applicant’s license amendment application regarding any proposed new fire protection program should produce an opportunity to petition to intervene in that license amendment proceeding and file contentions regarding any challenges Petitioners might have to the Applicant’s new proposed fire protection program. In addition, given the timing of the Staff’s and Commission’s review of the current license renewal application, there exists the possibility that the license amendment application might also trigger another opportunity to petition to intervene in the license renewal now at issue, if appropriate and

¹⁴⁹ See License Renewal Review Schedule, found on the NRC website at <http://www.nrc.gov/reactors/operating/licensing/renewal/applications/harris.html> (last visited Aug. 2, 2007). We note that the schedule in question is preceded by the following language:

These schedules reflect work plans that are subject to change. Early completion of a milestone may affect the target date of future milestones. Subsequent meetings and comment periods may change based on the revised schedule. This work plan will be updated on a periodic basis. Please see the NRC Public Meetings Page or contact the listed [Project Manager] for the latest information on meetings and status.

adequate contentions are timely and properly submitted under relevant requirements including, e.g., 10 C.F.R. § 2.309(c), (f)(1), (f)(2).¹⁵⁰

If, on the other hand, the Applicant fails to file its intended license amendment application in time to allow for an aging review of any new proposed fire protection system, this would raise a significant question whether, as required under 10 C.F.R. § 54.29(a), the “actions . . . identified and . . . taken [on aging issues]” would in fact be “such that there is reasonable assurance that the activities authorized by the renewed license will continue to be conducted in accordance with the CLB,” at least with regard to fire protection systems, structures and components subject to aging review.¹⁵¹ Such a reading and application of the rule is supported by the following statement of the Commission in its most recent rulemaking on license renewal (made in the context of discussing the non-applicability of the backfit rule in license renewal and an industry request to require a consideration of the costs of aging management in license renewal):

[T]he Commission sees no justification for requiring a consideration of costs among alternative aging management programs. The *renewal process* is designed such that a renewal applicant proposes the alternatives it believes manages the effects of aging for those structures and components defined by the rule. *The NRC staff has the responsibility of reviewing the applicant's proposals and determining whether they are*

¹⁵⁰ See *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-05-24, 62 NRC 551 (2005); *Millstone*, LBP-05-16, 62 NRC 56 (2005); *Millstone*, CLI-04-36, 60 NRC 631 (2004); *Millstone*, LBP-04-15, 60 NRC 81 (2004).

¹⁵¹ In this regard, a related question indeed arises, how any license renewal could be viable when the current fire protection system referred to in the renewal application has been brought into question and no appropriate and legally authorized alternative system has been put in place. See Tr. at 178-83. We note that, while Applicant’s counsel challenged Petitioners’ characterization of the plant as being in “noncompliance,” and the Director’s Final Decision on the Petitioners’ § 2.206 petition discusses various past, present, and future efforts of the Applicant to compensate for and otherwise address problems, the Decision also makes repeated direct and implied references to the Applicant’s “noncompliances.” See, e.g., Final Director’s Decision at 4, 5, 6, 7, 8, 9, 11, 12, 13. Reviewing the currently-configured system as to aging issues would not seem to satisfactorily address all *relevant* aging issues — *i.e.*, those applicable to a future system that is now unknown, and which as a result cannot now be reviewed with regard to aging issues, at least in any complete or unequivocal manner.

adequate such that there is reasonable assurance that activities authorized by the renewed license will continue to be conducted in accordance with the CLB. The Commission believes that *this license renewal review* must necessarily be performed without regard to cost.¹⁵²

This statement, which in fact concludes the Commission's Statement of Consideration on its 1995 rulemaking, is consistent with a similar statement, pointed out to us by Petitioners¹⁵³ and found in the Introduction to the Staff's Standard Review Plan for License Renewal, that "[t]he application must be sufficiently detailed to permit the reviewers to determine (1) whether there is reasonable assurance that the activities authorized by the renewed license will continue to be conducted in accordance with the CLB"¹⁵⁴

¹⁵² 60 Fed. Reg. at 22,490-91 (emphasis added). We note that we became aware of this language only after the July 17 oral argument, while reviewing the 1995 license renewal rulemaking, no party, including the Staff through its counsel, having brought it to our attention before or during oral argument.

¹⁵³ See Petitioners' Reply at 7-8.

¹⁵⁴ NUREG-1800 at 1 (emphasis added). We are also mindful of certain additional language from NUREG-1800 at 4.7-1 that could also lead a reasonable reader to conclude that, while the "adequacy of the measures *for the term of the current license* is not within the scope of the license renewal review" (emphasis added), the adequacy of such measures *for the term of a renewal period* might well be *within* the scope of license renewal.

We note as well, to the contrary, the suggestion made by Staff and Applicant at oral argument (after the parties had been directed to focus their oral arguments regarding Contention TC-1 on certain defined questions including the "reasonable assurance" issue, see 6/29/07 Order (Regarding Questions) at 1-2) to the effect that NUREG-1800 needs to be read in the context of the scoping process the Staff goes through with regard to any license renewal application, which involves first determining what systems, structures, and components need to be *reviewed* with respect *only to aging-related* issues. See Tr. at 102-05; 113-18. In this regard, however, we would observe that Chapter 2 of the same document, entitled "Scoping and Screening Methodology for Identifying Structures and Components Subject to Aging Management Review and Implementation Results," also contains numerous instances of language that, while clearly addressed to the scoping process, suggests that, even if the Staff's ultimate, most detailed review is on aging issues related to those systems, structures and components that are identified as being "within the scope of license renewal," its actual review process includes more than merely looking at aging issues.

For example, NUREG-1800 contains references to the Staff's "review" of "the NRC's safety evaluation report (SER) that was issued along with the operating license for the facility," and various parts of the plant's Updated Final Safety Analysis Report (UFSAR) and Probabilistic Risk Analysis (PRA), in addition to "the applicant's docketed correspondence

(continued...)

Given the Commission's indication that "[a]djudicatory hearings in individual license renewal proceedings will share *the same scope of issues as our NRC Staff review*,"¹⁵⁵ it would seem reasonable to suppose that, if the Staff has the "responsibility of reviewing the applicant's proposals and determining whether they are adequate such that there is reasonable assurance that activities authorized by the renewed license will continue to be conducted in accordance with the CLB," as stated by the Commission in 1995, this would likewise be within the scope of a license renewal adjudication proceeding, at least when "ongoing regulatory processes" fail to address a relevant issue — as would be the case if the Staff did not review any new proposed fire protection system with regard to aging issues. For it is undisputed, as stated in the

¹⁵⁴(...continued)

related to . . . 10 C.F.R. 50.48, 'Fire Protection.'" NUREG-1800 § 2.1.3, at 2.1-2 and 2.1-3. Another example of what a Staff reviewer "should review" is that of "relevant sources of information" to "identify the set of plant-specific conditions of normal operation, DBAs, external events, and natural phenomena for which the plant must be designed to ensure [functions including] . . . [t]he capability to shut down the reactor and maintain it in a safe shutdown condition." *Id.* § 2.1.3.1.1, at 2.1-5.

More importantly, however, as is stated in both the Introduction to NUREG-1800 and by the Commission in the 1995 license renewal rulemaking at 60 Fed. Reg. at 22,490-91 (see *supra* text accompanying note 152), the Staff would seem undisputedly to have *some* meaningful level of "*responsibility*" to determine whether the Applicant's proposals on aging-related actions are "adequate such that there is reasonable assurance that activities authorized by the renewed license will continue to be conducted in accordance with the CLB." And this is relevant to our consideration herein, not in any sense to second-guess how the Staff performs its functions, see *Carolina Power & Light Co.* (Shearon Harris Nuclear Power Plant, Units 1, 2, 3, and 4), CLI-80-12, 11 NRC 514, 516 (1980), but because, as indicated above, the Commission has stated that the issues in a license renewal adjudicatory proceeding "share *the same scope of issues as our NRC Staff review*." *Turkey Point*, CLI-01-17, 54 NRC at 10 (emphasis added).

¹⁵⁵ *Turkey Point*, CLI-01-17, 54 NRC at 10 (emphasis added); see *supra* Section IV.B.1, at pp. 19-20.

Application at issue, that the fire protection system is within the scope of license renewal¹⁵⁶ and contains components that require an aging review.¹⁵⁷

To be sure, we are aware of the Commission's 1991 statement, pointed out to us by the Staff, that "Section 54.29, which defines the standard for issuance of a renewed license, does not require a finding regarding the adequacy of, or compliance with, the plant's licensing basis."¹⁵⁸ And we note the additional statements pointed out to us by Applicant and Staff, including the Commission's indication in 1995 that "the regulatory process provides reasonable assurance that there is compliance with the CLB."¹⁵⁹ But we cannot ignore the Commission's concluding remarks to its 1995 Statement of Consideration, which we quote above.¹⁶⁰ And, significantly, if we analyze the two statements from the 1995 rulemaking together, we see that they can in fact be read to be consistent with each other, as well as with § 54.29 and *Turkey Point*, in the manner we discuss above, regarding "ongoing regulatory processes" and the "reasonable assurance" requirement.¹⁶¹

Of course, the rule itself, which has the force of law, prevails over guidance documents such as the Commission's rulemaking Statements of Consideration and the Staff's Standard

¹⁵⁶ See Application § 2.3.3.31, at 2.3-116.

¹⁵⁷ See *id.* at 2.3-117 to 2.3-118.

¹⁵⁸ 56 Fed. Reg. at 64,961; see Staff Response at 16.

¹⁵⁹ 60 Fed. Reg. at 22,473-74; see Staff Response at 16-17.

¹⁶⁰ See *supra* text accompanying note 152; 60 Fed. Reg. at 22,490-91.

¹⁶¹ See *supra* at pp. 37-41. By comparison, two fundamental rules of statutory construction are that a "statute's provisions should be read to be consistent with one another, rather than the contrary," *United Steelworkers of America, AFL-CIO-CLC v. North Star Steel Co., Inc.*, 5 F.3d 39, 43 (3d Cir. 1993), and "that 'a statute ought, upon the whole, to be so construed that, if it can be prevented, no clause, sentence, or word shall be superfluous, void, or insignificant,'" *TRW, Inc. v. Andrews*, 534 U.S. 19, 31 (2001) (quoting *Duncan v. Walker*, 533 U.S. 167, 174 (2001) (internal quotation marks omitted)).

Review Plan. Under the rule in question, *i.e.*, 10 C.F.R. § 54.29,¹⁶² a renewed license may be issued if “actions” related to aging (both managing the effects of aging and “time-limited aging analyses”) have been or will be taken “such that there is reasonable assurance that the activities authorized by the renewed license will continue to be conducted in accordance with the CLB” (and “that any changes made to the plant's CLB in order to comply with this paragraph are in accord with the Act and the Commission's regulations”).¹⁶³

If, in this license renewal, the “actions” required in the rule do not include “actions” relating to the ultimate fire protection system that will at some point in the future be put in place, this would bring into doubt whether there could be any “reasonable assurance that the activities

¹⁶² 10 C.F.R. § 54.29 provides as follows:

§ 54.29 Standards for issuance of a renewed license.

A renewed license may be issued by the Commission up to the full term authorized by 54.31 if the Commission finds that:

(a) Actions have been identified and have been or will be taken with respect to the matters identified in Paragraphs (a)(1) and (a)(2) of this section, such that there is reasonable assurance that the activities authorized by the renewed license will continue to be conducted in accordance with the CLB, and that any changes made to the plant's CLB in order to comply with this paragraph are in accord with the Act and the Commission's regulations. These matters are:

(1) managing the effects of aging during the period of extended operation on the functionality of structures and components that have been identified to require review under § 54.21(a)(1); and

(2) time-limited aging analyses that have been identified to require review under § 54.21(c).

(b) Any applicable requirements of Subpart A of 10 CFR Part 51 have been satisfied.

(c) Any matters raised under § 2.335 have been addressed.

¹⁶³ We note also the provision at subsection (c) of § 54.29 referring to 10 C.F.R. § 2.335, which provides for a petition for waiver of a rule if “special circumstances with respect to the subject matter of the particular proceeding are such that the application of the rule or regulation (or a provision of it) would not serve the purposes for which the rule or regulation was adopted.” See *also* the Commission's discussion in the *McGuire/Catawba* license renewal proceeding of the “vehicle by which a petitioner may seek to raise issues that would otherwise be beyond the scope of a license renewal proceeding” to be found at 10 C.F.R. [then] § 2.758 (now found at § 2.335). *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-14, 55 NRC 278, 291 (2002). However, no such petition has been filed with us.

authorized by the renewed license will continue to be conducted in accordance with the CLB,” as required under the rule. In other words, there would seem to be a “genuine dispute” whether the “actions” required under § 54.29(a) would — or *could* — be “such that there is reasonable assurance that the activities authorized by the renewed license will continue to be conducted in accordance with the CLB,” as also required under § 54.29(a). And to the extent that ambiguity exists, the Commission’s concluding statement from its 1995 Statement of Consideration that is quoted above¹⁶⁴ would seem to be most directly on point as to the interpretation of 10 C.F.R. § 54.29(a): The “applicant’s proposals” as to aging must, according to the Commission’s 1995 interpretation, be “*adequate* such that [it can be determined] that there is reasonable assurance that the activities authorized by the renewed license will continue to be conducted in accordance with the CLB.”¹⁶⁵ In the same vein, notwithstanding some references to “rebuttable presumptions” in their Petition, the essential thrust of Petitioners’ argument on Contention TC-1 is that, while they freely admit they do not challenge any aging issues,¹⁶⁶ they do claim that, whatever “actions” might at some point in the future be taken, these are *not* “adequate” to provide the requisite “reasonable assurance,” or indeed any “assurance” that “the licensing bas[i]s . . . provide[s] and maintain[s] an acceptable level of safety for operation so that operation will not be inimical to public health and safety or common defense and security.”¹⁶⁷

With regard to the specific circumstances presented to us in Contention TC-1, we would note that, to our knowledge, the precise situation presented by this case has never before arisen in any license renewal proceeding — that is to say, a situation in which there is some

¹⁶⁴ See *supra* text accompanying note 152; 60 Fed. Reg. at 22,490-91.

¹⁶⁵ 60 Fed. Reg. at 22,490-91 (emphasis added).

¹⁶⁶ See Tr. at 127.

¹⁶⁷ Petition at 8 (quoting 56 Fed. Reg. at 64,946); see *id.* at 11, 23, 24; Petitioners’ Reply at 7-8; Tr. at 75-77, 80-81, 82-87, 127, 155-57.

possibility of the Staff *not being able* to “review[] the applicant's proposals [on aging-related matters] and determin[e] whether they are adequate such that there is reasonable assurance that activities authorized by the renewed license will continue to be conducted in accordance with the CLB,”¹⁶⁸ *because* a viable system within the scope of license renewal is not yet in place.

We are aware that the Commission in the *McGuire/Catawba* license renewal proceeding stated, in CLI-02-14, that “[n]othing in our case law or regulations suggests that license renewal is an occasion for far-reaching speculation about unimplemented and uncertain plans” (referring to Duke’s plan to use MOX [mixed-oxide] fuel in a pilot program).¹⁶⁹ The Commission in reaching its ruling therein relied on § 54.29 and the rule’s “focus[] on the ‘current’ licensing basis,” noting that the definition of “current licensing basis” at § 54.3 includes “NRC requirements . . . *that are docketed and in effect.*”¹⁷⁰ On this basis the Commission ruled that the MOX fuel issue was not ripe for consideration in that proceeding.¹⁷¹

By contrast, however, in this proceeding, Applicant has made a “written commitment” to apply for the license amendment in question, to “ensur[e] compliance with and operation within applicable NRC requirements and the plant-specific design basis . . . ,”¹⁷² which would distinguish this case from the *McGuire/Catawba* case.

In such circumstances, a failure of the Applicant to file its intended license amendment application in time to allow for an aging-related review of whatever new fire protection system

¹⁶⁸ 68 Fed. Reg. at 22,490-91.

¹⁶⁹ *McGuire/Catawba*, CLI-02-14, 55 NRC at 293.

¹⁷⁰ *Id.* (emphasis added).

¹⁷¹ *Id.*

¹⁷² See 10 C.F.R § 54.3; 60 Fed. Reg. at 22,274.

would otherwise be proposed and possibly approved, might arguably be occasion to submit a new request for hearing, petition to intervene, and contention(s) with regard to the renewal of the Shearon Harris license, possibly in conjunction with a petition for waiver of any exclusion of non-aging issues under 10 C.F.R. § 54.29, if it can be argued that the requirements of § 2.335 are met.¹⁷³

We do not, of course, by making this observation mean to state or imply any future conclusions that might be reached on whether any such contention(s) would meet all of the requirements of 10 C.F.R. § 2.309(c), (f)(1), and/or (f)(2). But, in light of the preceding analysis, Petitioners may wish to follow the progress of the intended license amendment application. And in any event, given that the term of the current license does not end until 2027, there would seem to be more than sufficient time to address Petitioners' concerns and thereby better assure that, going into any new license term, the plant will ultimately be fully in compliance with all relevant fire protection requirements, so as to protect the health and safety of the public — which, as Petitioners point out and the Commission observed early on in its existence, is what the NRC's "licensing procedure is devoted to assuring."¹⁷⁴

B. Environmental Contention EC-1: Failure to Address Aircraft Attacks

Petitioners in this contention state:

The Environmental Report for the SHNPP license extension fails to satisfy NEPA because it does not address the environmental impacts of a successful attack by the deliberate and malicious crash of a fuel laden and/or explosive laden aircraft and the severe accident consequences of the aircraft's impact and penetration on the facility. It is unreasonable for the NRC to dismiss the possibility of an aviation attack on the SHNPP in light of the studies by the NRC that this is a real possibility that could have devastating results.¹⁷⁵

¹⁷³ See *supra* note 163.

¹⁷⁴ *Petition for Remedial Action*, CLI-78-6, 7 NRC at 404.

¹⁷⁵ *Petition* at 24.

1. Petitioners' Basis for Contention EC-1

In support of this contention Petitioners note that “[t]he EIS for the original [Shearon Harris plant] license did not evaluate the consequences of an aviation attack and the resulting impact, penetration, explosion and fire,” and argue that the “potential for accidents caused by deliberate malicious actions and the resulting equipment failures is not only reasonably foreseeable, but is likely enough to qualify as a ‘design-basis accident,’ i.e., an accident that must be designed against under NRC safety regulations.”¹⁷⁶ Petitioners also cite in support of this contention the Argonne National Laboratory’s analysis that was published in 1982 as NUREG-2859, “Evaluation of Aircraft Hazards Analysis for Nuclear Power Plants” [hereinafter NUREG-2859], but subsequently removed from the NRC’s public document room after the attacks of September 11, 2001.¹⁷⁷

Noting that this study focused on accidental aircraft crashes, Petitioners argue that “the same threat analysis can and should be made for the impacts of deliberate malicious actions” directed at the plant.¹⁷⁸ Petitioners quote various portions of NUREG 2859 that address the threats and potential effects associated with aircraft crashes involving the collision of aircraft with power plant structures.¹⁷⁹

In addition, Petitioners cite the NRC’s March 2000 request that the Turkey Point nuclear plant respond to certain questions about “expanded aircraft operations at the nearby Homestead Air Force Base,” the response thereto, and an October 2000 study of the spent fuel

¹⁷⁶ *Id.* at 24-25.

¹⁷⁷ *Id.* at 25 (citing NUREG-2859). Petitioners indicate that in any evidentiary hearing in this proceeding they would seek to have this document introduced into the record “because it remains relevant to aircraft attacks, both accidents and deliberate malicious actions.” *Id.* at n.12.

¹⁷⁸ *Id.* at 25.

¹⁷⁹ *Id.* at 25-27.

pool hazard at plants undergoing decommissioning, in support of Contention EC-1.¹⁸⁰

Petitioners also cite and discuss the NRC's amendment of its "design basis threat" rule,¹⁸¹ but challenge it as contrary to the earlier studies and information.¹⁸²

Finally, Petitioners point out that 10 C.F.R. § 51.53(c)(ii)(L) (apparently referring to 10 C.F.R. § 51.53(c)(3)(ii)(L)) requires license renewal applicants to consider alternatives to mitigate severe accidents, or "SAMAs," and that SAMAs for aircraft impact have not been previously considered for the Shearon Harris plant.¹⁸³ Petitioners assert that the Applicant's Environmental Report does not address SAMAs for aircraft impact, and therefore fails to satisfy 10 C.F.R. § 51.53(c)(3)(iii), "because it does not consider reasonable alternatives for avoiding or reducing the environmental impacts of this class of accidents."¹⁸⁴ Thus, Petitioners argue, "the application is insufficient" and "cannot be approved without a full study of the threats from aviation attacks and implementation of the SAMAs required to prevent or mitigate the impacts from those attacks."¹⁸⁵

¹⁸⁰ *Id.* at 27-28 & nn.13, 14 (citing Letter from R.J. Hovey, Vice President – Turkey Point Plant, to NRC, Response to Request for Information Regarding the Potential Risk of the Proposed Civil and Government Aircraft Operation at Homestead Air Force Base on the Turkey Point Plant (May 2, 2000); NRC, Technical Study of Spent Fuel Pool Accident Risk at Decommissioning Nuclear Power Plants (Oct. 2000).

¹⁸¹ *Id.* at 28 & n.15 (citing SECY-06-0219, Final Rulemaking to Revise 10 C.F.R. 73.1, Design Basis Threat (DBT) Requirements (Oct. 30, 2006) [hereinafter SECY-06-0219]).

¹⁸² *Id.* at 29 & n.17 (citing Union of Concerned Scientists Issue Brief: The NRC's Revised Security Regulations (Feb. 1, 2007), at http://www.ucsusa.org/assets/documents/clean_energy/20070201-ucs-aircraft-fire-hazards.pdf (last visited Aug. 2, 2007)).

¹⁸³ *Id.* at 29.

¹⁸⁴ *Id.* at 29-30.

¹⁸⁵ *Id.* at 30. We note that Petitioners provide additional argument relating to environmental issues in license renewal, SAMAs, and related issues in the Introduction to its Petition and in the section of it entitled "Statutory and Regulatory Framework." See *id.* at 3-4; 13-17.

2. Positions of Applicant and NRC Staff on Contention EC-1

The Staff's response to Contention EC-1 is brief and to the point. In the Staff's view, the contention raises concerns which are "clearly beyond the scope of this license renewal proceeding" under applicable and binding Commission case law authority.¹⁸⁶ Staff cites the Commission's recent ruling in the *Oyster Creek* license renewal proceeding, in which the Commission upheld the Licensing Board's decision rejecting a contention challenging an applicant's failure to consider an aircraft attack scenario in its environmental report's SAMA analysis.¹⁸⁷ Staff points out the Commission's disagreement therein with, and decision not to follow in other Federal Circuits the 2006 decision of the United States Court of Appeals for the Ninth Circuit in *San Luis Obispo Mothers for Peace v. NRC*, that the NRC could not under NEPA categorically refuse to consider the consequences of a terrorist attack against a spent fuel storage facility.¹⁸⁸ Staff also notes the Commission's further indication that

there is no basis for admitting a NEPA-terrorism contention in a license renewal proceeding, because the [GEIS] had already performed a discretionary analysis of terrorist acts in connection with license renewal, and concluded that the core damage and radiological release from such acts would be no worse than the damage and release to be expected from internally initiated events.¹⁸⁹

¹⁸⁶ Staff Response at 18-19.

¹⁸⁷ *Id.* at 19 (citing *Amergen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), CLI-07-8, 65 NRC 124, 128-29 (2007), *aff'g* LBP-06-7, 63 NRC 188 (2006)).

¹⁸⁸ *Id.* at 19 & n.25 (citing *Oyster Creek*, CLI-07-8, 65 NRC at 128; *San Luis Obispo Mothers for Peace v. NRC*, 449 F.3d 1016 (9th Cir. 2006), *cert. denied sub nom.*, *Pacific Gas & Elec. Co. v. San Luis Obispo Mothers for Peace*, 127 S. Ct. 1124 (2007)).

¹⁸⁹ *Id.* at 19 (citing *Oyster Creek*, CLI-07-8, 65 NRC at 131).

According to the Staff, the “Commission’s decision in *Oyster Creek* establishes binding precedent for the resolution of Contention EC-1 in this proceeding,” and Contention EC-1 must therefore be rejected.¹⁹⁰

Applicant asserts that Contention EC-1 is inadmissible for essentially the same reasons, adding that it is also inadmissible “because the GEIS already addresses the environmental impacts of sabotage, and Petitioners neither request a waiver of the GEIS generic determination regarding sabotage nor do they provide new and significant information that would be required for such a waiver to be granted.”¹⁹¹ Applicant also quotes, *inter alia*, the following language from the Commission’s *Oyster Creek* decision:

[A]s a general matter, NEPA “imposes no legal duty on the NRC to consider intentional malevolent acts . . . in conjunction with commercial power reactor license renewal applications.” “The ‘environmental’ effect caused by third-party miscreants ‘is . . . simply too far removed from the natural or expected consequences of agency action to require a study under NEPA.’”¹⁹²

. . . .

A license renewal proceeding is distinguishable from the situation considered in *San Luis Obispo Mothers for Peace*, where the NRC had before it a proposal to construct a dry cask storage facility at a nuclear reactor site. Unlike the situation in that case, a

¹⁹⁰ *Id.* at 19.

¹⁹¹ Applicant’s Answer at 16-17. Applicant goes on to quote the following language of the Commission in the *Turkey Point* proceeding:

The Commission recognizes that even generic findings sometimes need revisiting in particular contexts. Our rules thus provide a number of opportunities for individuals to alert the Commission to new and significant information that might render a generic finding invalid, either with respect to all nuclear power plants or for one plant in particular. In the hearing process, for example, petitioners with new information showing that a generic rule would not serve its purpose at a particular plant may seek a waiver of the rule.

Id. at 20 (quoting *Turkey Point*, CLI-01-17, 54 NRC at 12) (citing *Entergy Nuclear*, CLI-07-3, 65 NRC at 20).

¹⁹² Applicant’s Answer at 17 (citing *Oyster Creek*, CLI-07-8, 65 NRC at 129 (quoting *McGuire*, CLI-02-26, 56 NRC at 364, 365); *Pilgrim*, LBP-06-23, 64 NRC at 300).

license renewal application does not involve new construction. So there is no change to the physical plant and thus no creation of a new “terrorist target.”¹⁹³

In addition, Applicant notes Commission statements, also cited by Staff, to the effect that the GEIS concluded that any sabotage event would produce no worse core damage or radiological release than would be expected from internally initiated events.¹⁹⁴ Thus, Applicant insists, “no separate NEPA analysis is required to evaluate the potential environmental impacts of a terrorist attack because the GEIS analysis of severe accident consequences bounds the potential consequences that might result from a large scale radiological release, regardless of the initiating cause.”¹⁹⁵

Applicant also argues that Petitioners fail to “provide a concise statement of the alleged facts or expert opinion supporting the contention that a deliberate and malicious crash must be addressed separately or that the environmental impacts of such an act are not already encompassed within the GEIS”; fail to “explain how their assertions regarding Contention EC-1 would make a difference in the outcome of the licensing renewal proceeding;” and fail to “allege how the environmental impacts of a ‘deliberate and malicious crash of a fuel laden and/or explosive laden aircraft’ would differ from the environmental impacts of an ‘internally initiated severe accident.’”¹⁹⁶

Petitioners’ arguments regarding SAMAs also lack merit, Applicant asserts, among other things because SAMAs are typically limited to damage to the reactor core, and Petitioners have not in any event referred to specific portions of the SAMA part of the Application or shown any

¹⁹³ *Id.* at 18 (citing Oyster Creek, CLI-07-8, 65 NRC at 130 n.25).

¹⁹⁴ *Id.* at 18 (citing *McGuire*, CLI-02-26, 56 NRC at 365 n.24 (citations omitted)).

¹⁹⁵ *Id.* at 19.

¹⁹⁶ *Id.* at 24-25.

genuine dispute with the Application in this regard.¹⁹⁷ In addition, Applicant challenges Contention EC-1 to the extent that it “suggest[s] that aviation attacks are design basis threats warranting backfitting to protect the public health and safety,” arguing that “[s]uch allegations are not only beyond the scope of this license renewal proceeding because they are unrelated to aging, but [also because they are] impermissible challenges” to the NRC regulation on the design basis threat for nuclear power plants, found at 10 C.F.R. § 73.1, and are “barred by 10 C.F.R. § 50.13.”¹⁹⁸

3. Reply of Petitioners on Contention EC-1

In addition to their general argument that their contentions are material and have a legal basis, explanations supported by evidence, documents, facts and/or proposed expert testimony, Petitioners question the Commission’s *Oyster Creek* decision on various grounds, including that it “ignores the mandate from the Supreme Court in *San Luis Obispo Mothers for Peace . . .*.”¹⁹⁹ Petitioners further challenge the “NRC staff’s conclusion that all aviation attacks are terrorism-related so therefore all contentions raising the issue of aviation attacks are not admissible” as “circular reasoning.”²⁰⁰ Citing a definition of “terrorism” from the Federal Criminal

¹⁹⁷ *Id.* at 25-28.

¹⁹⁸ Applicant’s Answer at 22-24 (citing, *inter alia*, 10 C.F.R. § 2.335). 10 C.F.R. § 50.13 provides:

An applicant for a license to construct and operate a production or utilization facility, or for an amendment to such license, is not required to provide for design features or other measures for the specific purpose of protection against the effects of (a) attacks and destructive acts, including sabotage, directed against the facility by an enemy of the United States, whether a foreign government or other person, or (b) use or deployment of weapons incident to U.S. defense activities.

¹⁹⁹ Petitioners’ Reply at 9.

²⁰⁰ *Id.*

Code,²⁰¹ Petitioners argue that “not all aviation attacks would be from ‘terrorists,’” that “it makes little difference to the disastrous outcome at the nuclear plant whether the motivation for the attack is political or psychotic,” and that, “[n]o matter what the motivation, the [Shearon Harris plant] is not designed to withstand the impacts of an aviation attack or its direct consequences.”²⁰²

Again noting the lack of any SAMAs in the Application for aircraft impacts, Petitioners urge that the legitimacy of any studies cited by the Staff is “a matter in dispute that should be left to the ASLB for adjudication,” in which the issues should be “whether the Commission has resolved these issues for the [plant], and whether during the . . . renewal period the risk to public health and safety from an aviation attack and its consequences will be mitigated.”²⁰³

4. Board Ruling on Contention EC-1

Based on the Commission’s ruling in the *Oyster Creek* proceeding, we find that Contention EC-1 is beyond the scope of this proceeding, therefore fails to meet the requirements of 10 C.F.R. § 2.309(f)(1)(iii), (iv), (vi),²⁰⁴ and is inadmissible. Petitioners are incorrect that we must interpret the U.S. Supreme Court’s denial of *certiorari* as a “mandate” endorsing the Ninth

²⁰¹ *Id.* at 10 (quoting from 18 U.S.C. § 2331 as follows:

activities that involve violent . . . or life-threatening acts . . . that are a violation of the criminal laws of the United States or of any State and . . . appear to be intended (i) to intimidate or coerce a civilian population; (ii) to influence the policy of a government by intimidation or coercion; or (iii) to affect the conduct of a government by mass destruction, assassination, or kidnapping; and . . . (C) occur primarily within the territorial jurisdiction of the United States . . . [or] . . . (C) occur primarily outside the territorial jurisdiction of the United States . . .).

²⁰² *Id.* at 9-10.

²⁰³ *Id.* at 10-11.

²⁰⁴ See discussion *supra* at end of Section IV.A.

Circuit's decision in *San Luis Obispo Mothers for Peace*.²⁰⁵ The Supreme Court has made clear that a denial of *certiorari* "carries with it no implication whatever regarding the Court's views on the merits of a case which it has declined to review."²⁰⁶

Because the Supreme Court has neither endorsed nor rejected the reasoning of the Ninth Circuit, and because the Shearon Harris plant is located outside the jurisdiction of the Ninth Circuit, we are bound by the Commission's decision in *Oyster Creek*, absent anything that would distinguish this case from that one. As we recognized in our ruling on Contention TC-1, Commission case law is clear that "licensing boards are bound to comply with [Commission adjudicatory decisions]."²⁰⁷

Petitioners' assertion that the Commission's decision in *Oyster Creek* is limited to aviation attacks perpetrated for "terrorism" purposes as the word is defined in the Federal Criminal Code, and that the NRC must consider non-terrorism "deliberate malicious actions," must fail in light of the Commission's specific exclusion from NEPA consideration in NRC license renewal proceedings any "intentional malevolent acts" or actions of "third-party miscreants."²⁰⁸ Moreover, Petitioners have failed to distinguish this proceeding from the *Oyster Creek* proceeding in any meaningful way.

²⁰⁵ Petitioners' Reply at 9.

²⁰⁶ *Maryland v. Baltimore Radio Show*, 338 U.S. 912, 919 (1950); see also *Excel Communications, Inc. v. AT&T Corp.*, 528 U.S. 946 (1999) ("The importance of the questions presented in this *certiorari* petition makes it appropriate to reiterate the fact that the denial of the petition does not constitute a ruling on merits.").

²⁰⁷ *Virgil C. Summer*, ALAB-710, 17 NRC at 28.

²⁰⁸ *Oyster Creek*, CLI-07-8, 65 NRC at 129 (citing *McGuire/Catawba*, CLI-02-26, 56 NRC at 365; *Private Fuel Storage, LLC* (Independent Spent Fuel Storage Installation), CLI-02-25, 56 NRC 340, 349 (2002)).

Thus we are bound by the *Oyster Creek* decision, and must reject Petitioners' invitation to "reconsider" its scope in the context of this relicensing proceeding,²⁰⁹ and deny admission of Contention EC-1. In addition to being outside the scope of the proceeding and therefore not in compliance with 10 C.F.R. § 2.309(f)(1)(iii), it also does not meet the requirements of §§ 2.309(f)(1)(iv), (vi), which require a demonstration that the issue raised by the contention is "material to the findings the NRC must make to support the action that is involved in the proceeding," and "sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact."

We address below in Section VI of this Memorandum the backfit issue raised by Petitioners.

C. Environmental Contention EC-2: Failure to Address Fire Impacts of Air Attacks

Petitioners in this environmental contention state:

The Environmental Report for the SHNPP license extension fails to satisfy NEPA because it does not address a significant fire involving noncompliant fire protection features for both primary and redundant safe shutdown electrical circuits caused by a deliberate malicious action using a fuel-laden and/or explosive-laden aircraft on the facility.²¹⁰

1. Petitioners' Basis for Contention EC-2

In support of this contention Petitioners rely on the same arguments as those put forth for Contentions TC-1 and EC-1, emphasizing in this contention that the collision of an aircraft into the plant could cause fires, with all their attendant risks.²¹¹ Also cited in support of this contention is the NRC's recognition in amending the design basis rule that nuclear power plants "could only be protected by passive measures."²¹² Petitioners argue that "significant fires

²⁰⁹ See Petitioners' Reply at 9.

²¹⁰ Petition at 30.

²¹¹ *Id.* at 30-33.

²¹² *Id.* at 33 & n.22 (citing SECY-06-0219).

caused by malicious acts are credible,” referring to the structural damage caused by fires arising from the September 11, 2001, attacks on the World Trade Center, and assert that the “structures protecting the electric circuits for the control operation of the safe shutdown systems at [the plant] are similarly vulnerable.”²¹³

In addition, Petitioners contend, “[t]he fire protection regulations, even if met in full and nonexempted, are intended to deal with a single fire in a single room or area,” with no other equipment damage presumed, and the “fire protection regulations are not designed for and are not adequate to deal with fires in multiple rooms and areas that can easily result from an aircraft crash.”²¹⁴ Thus, Petitioners argue, Applicant’s “noncompliance and violations of the fire protection regulations at the [plant] would be compounded by deliberate malicious actions.”²¹⁵

Finally, as with Contention EC-1, Petitioners assert that this contention brings into play the requirement in 10 C.F.R. 51.53(c)(3)(ii)(L) for consideration of alternatives to mitigate severe accidents, or SAMAs.²¹⁶ Because Appendix E of the Applicant’s ER does not address any such alternatives relating to “fires caused by aircraft impact,” Petitioners argue the ER fails to satisfy 10 C.F.R. § 51.53(c)(3)(iii), and the Application “cannot be approved without a full study of the risks associated with fires and explosions caused by aviation attacks and implementation of the SAMAs required to prevent or mitigate the impacts.”²¹⁷

²¹³ *Id.* at 33-34.

²¹⁴ *Id.* at 34.

²¹⁵ *Id.*

²¹⁶ Petition at 34.

²¹⁷ *Id.* at 34-35; *see also id.* at 1-4, 7-17.

2. Positions of Applicant and NRC Staff on Contention EC-2

Both the Applicant and Staff submit that this contention is inadmissible for the same reasons they contend Contention EC-1 is inadmissible.²¹⁸

3. Reply of Petitioners on Contention EC-2

Likewise, Petitioners provide the same argument in reply with regard to Contention EC-2 as for Contention EC-1.²¹⁹

4. Board Ruling on Contention EC-2

For the same reasons set forth above with respect to Petitioners' Contention EC-1, we find Contention EC-2 to be beyond the scope of this proceeding under relevant and binding case law, and therefore deny its admission.

D. Environmental Contention EC-3: Inadequacies in Evacuation Plan

Petitioners in their final contention state:

Due to highly significant and unforeseen changes in circumstances, through dramatically increased populations and changing land uses, the evacuation plan for the SHNPP does not adequately protect the health and safety of the residents, students and workers around the plant.²²⁰

1. Petitioners' Basis for Contention EC-3

In support of this contention Petitioners start with the requirement that, "[b]efore a nuclear plant is licensed to operate, the NRC must have 'reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency.'"²²¹

Petitioners assert that, although the evacuation plan for the plant was found to provide

²¹⁸ Staff Response at 20; Applicant's Answer at 28-31.

²¹⁹ See Petitioners' Reply at 9-10.

²²⁰ Petition at 35.

²²¹ *Id.* (citing 10 C.F.R. Pt. 50, App. E and NUREG-0654, Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants (March 2002)).

“reasonable assurances’ that it would protect public health and safety” in 1987 when it was approved, “[i]t is apparent that this assurance cannot be relied upon for the entire 60-year period until the proposed relicensing period would expire.”²²² Thus, Petitioners insist, “[t]he opportunity to reassess the adequacy of the evacuation plan should be in the present ER and EIS as part of the relicensing review, and should focus on the significant changes with the plant and its environment, including the human environment.”²²³

Petitioners argue that the statutory and regulatory framework for license renewal establishes a “presumption that the present rules protect public health and safety,” which “can be rebutted with the presentation of significant new information.”²²⁴ Petitioners contend that there is significant new information in this regard, arising out of “significant changes in circumstances surrounding the plant that impact the adequacy of the evacuation plan.”²²⁵

Petitioners support this argument, and their contention, with the affidavit of Steven Wing, Ph.D., Associate Professor of Epidemiology at the University of North Carolina at Chapel Hill School of Public Health.²²⁶ According to Dr. Wing, there have been “significant population increases” in the area around the plant and within the 10-mile emergency planning zone (EPZ), and there will be additional increases through 2047, not only for the 10-mile zone but also for “the population within the 50-mile area around the plant.”²²⁷ Because the original 1987

²²² *Id.* at 35.

²²³ *Id.*

²²⁴ *Id.* at 35-36.

²²⁵ *Id.* at 36.

²²⁶ Petition at 36 (citing Attachment 4 to Petition).

²²⁷ *Id.* at 36.

evacuation plan “did not foresee the magnitude of these increases, [it] is inadequate today [and] in the future.”²²⁸

Petitioners indicate that Dr. Wing “also is concerned that there are numbers of children, women of childbearing age, senior citizens and nursing home residents who may have special difficulties in the event of an evacuation and may be more susceptible to radiation emissions and other hazards that could occur in connection with evacuation and relocation.”²²⁹ Other changes in circumstances asserted to be relevant in this proceeding are “increased vehicle use on the highways in the area to the point that the major thoroughfares used as evacuation routes may be impassible [sic] at most times of day,” which “reflects the significant increases in population as well as changes in land uses.”²³⁰ Petitioners also argue that forecasts relating to vehicle use on highways planned to be used for evacuation “may be completely useless by 2027 without extensive new spending on highway expansions and improvements.”²³¹

Petitioners point out that “local governments that have jurisdiction in the 10-mile and 50-mile EPZs have criticized the current emergency planning efforts because they do not have adequate planning, resources, training and staff to safely evacuate people within the EPZ during an emergency.”²³² Petitioners cite an October 3, 2006, resolution of the Orange County Board of Commissioners that “there is no coordinated emergency management and evacuation planning for the portion of the ingestion pathway beyond the area defined by the ten-mile radius

²²⁸ *Id.*; *see also id.* at 37.

²²⁹ *Id.* at 36.

²³⁰ *Id.* at 37.

²³¹ *Id.* (citing NC Department of Transportation, NC Statewide Transportation Plan, September 2004, *available at* <http://www.ncdot.org/doh/preconstruct/tpb/statewideplan/pdf/NCStatewideTransportationPlan.pdf> (last visited Aug. 2, 2007)).

²³² Petition at 37.

around Shearon Harris.”²³³ According to Petitioners, other local governments as well have expressed the same concerns.²³⁴

Petitioners provide, as an example of the “inability of local governments to meet the requirements for prompt and effective evacuation during an emergency,” the “response by the company and State and local officials to an accidental fire at a hazardous waste storage facility in Apex, North Carolina, part of which is within the EPZ.”²³⁵ In this example, Petitioners state, the “flaws in evacuating nearby residents, even in potentially critical situations,” were demonstrated by the “woefully ineffective” local evacuation plan, and the fact that “it was apparent that the government officials and the members of the public had no knowledge of the evacuation plans.”²³⁶

Thus, Petitioners urge, the renewal Application “cannot be approved without a full study of the current and forecasted populations, including susceptible populations, and the ability of the evacuation plan to provide ‘reasonable assurance’ that all of these people will be provided adequate care in case of an accident.”²³⁷ Petitioners also discuss, in the “Statutory and

²³³ *Id.* (quoting Orange County Board of Commissioners, “A Resolution Calling for Coordinated Emergency Management and Evacuation Planning Within the 60-mile Radius Ingestion Pathway for Potential Discharge of Airborne Nuclear Waste Material from the Shearon Harris Nuclear Power Plant” (Oct. 3, 2006) (Attachment 5 to Petition)).

²³⁴ *Id.* at 37-38.

²³⁵ *Id.* at 38. Petitioners point out that the official study of the fire and evacuation by the State of North Carolina has not been completed, and attach to the Petition newspaper articles pointing to evidence that would become available in the near future. See Attachment 6 to Petition.

²³⁶ Petition at 38.

²³⁷ *Id.*

Regulatory Framework” section of their Petition, evacuation issues²³⁸ as well as SAMAs,²³⁹ but they do not mention or challenge any specific parts of the Applicant’s SAMA analysis that concern, e.g., the input data relating to population and evacuation that is utilized in the analysis.

2. Positions of Applicant and NRC Staff on Contention EC-3

Applicant argues that this contention is outside the scope of license renewal, an impermissible attack on Commission regulations, and insufficiently supported.²⁴⁰ In support of its argument that the contention is out of scope for this proceeding, Applicant cites various Commission statements from the *Turkey Point* proceeding, including the following:

Issues like emergency planning - which already are the focus of ongoing regulatory processes - do not come within NRC safety review at the license renewal stage²⁴¹

Also quoted by the Applicant is the following language from the Commission’s decision in the *Millstone* license renewal case:

[T]he primary reason we excluded emergency-planning issues from license renewal proceedings was to limit the scope of those proceedings to “age-related degradation unique to license renewal.” Emergency planning is, by its very nature, neither germane to age-related degradation nor unique to the period covered by the *Millstone* license renewal application. Consequently, it makes no sense to spend the parties’ and our own valuable resources litigating *allegations of current deficiencies* in a proceeding that is *directed to future-oriented* issues of aging.²⁴²

Regarding Petitioners’ characterization of Contention EC-3 as an environmental contention, Applicant asserts that Petitioners “fail to identify any deficiency in the Environmental Report

²³⁸ *Id.* at 12, 17.

²³⁹ *Id.* at 13-17.

²⁴⁰ Applicant’s Answer at 31.

²⁴¹ *Id.* at 32 (quoting *Turkey Point*, CLI-01-17, 54 NRC at 10; citing *id.* at 9; *Millstone*, CLI-04-36, 60 NRC at 640); see also Staff Response at 21-22 (citing *Turkey Point*, CLI-01-17, 54 NRC at 9-10).

²⁴² Applicant’s Answer at 32 (citing *Millstone*, CLI-05-24, 62 NRC at 560-61 (footnote omitted) (emphasis added)); see also Staff Response at 22 (quoting *Millstone*, CLI-05-24, 62 NRC at 560-61 (citing, *inter alia*, 56 Fed. Reg. at 64,961; 60 Fed. Reg. at 22,464)).

and, therefore, Contention EC-3 must be rejected as fatally flawed.”²⁴³ Applicant argues that Petitioners’ assertion “that the ER should address the inability for [sic] the 1987 evacuation plan to protect the health and safety of the public” is but a “bald[]” and “conclusory assertion,” inadequate to support a contention.²⁴⁴ “In any event,” Applicant avers, “Petitioners cannot claim a deficiency in the Environmental Report for its failure to address a matter outside the scope of the licensing action for which the Environmental Report was prepared.”²⁴⁵

Applicant argues that Petitioners’ references to susceptible populations such as homebound persons and children are collateral attacks on the Commission’s emergency planning rules at 10 C.F.R. § 50.47(b)(10), (c)(2), which “establish a plume-exposure pathway emergency planning zone (‘EPZ’) for nuclear power reactors of an area about 10 miles in radius.”²⁴⁶ Applicant further asserts that the Petition “provides no documentary evidence or expert opinion in support of its broad claims of serious flaws in the evacuation plans,”²⁴⁷ and challenges certain newspaper articles provided as Attachment 6 to the Petition, averring that they “do not support the Petitioners’ claim that the evacuation around Apex, NC indicates that the local evacuation plan ‘was woefully ineffective and it was apparent that the government officials and the members of the public had no knowledge of the evacuation plans.’”²⁴⁸ “In fact,” Applicant asserts, “the articles identify that over 16,000 residents were evacuated . . . with no major

²⁴³ Applicant’s Answer at 32 n.22 (citing *McGuire*, LBP-02-4, 55 NRC at 78).

²⁴⁴ *Id.* (citing Petition at 17; *Sacramento Municipal Util. Dist.* (Rancho Seco Nuclear Generating Station), LBP-93-23, 38 NRC 200, 246 (1993)).

²⁴⁵ *Id.*

²⁴⁶ *Id.* at 33 (citing Petition at 36; 10 C.F.R. § 50.47(c)(2); *Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), CLI-87-12, 26 NRC 383, 395 (1987); *Citizens Task Force of Chapel Hill*, DPRM-90-1, 32 NRC 281, 290-92 (1990)).

²⁴⁷ *Id.* at 34.

²⁴⁸ *Id.* (citing Petition at 38).

injuries reported.”²⁴⁹ Applicant also argues, regarding a report on the Apex fire that Petitioners state is yet to be completed, that “[p]romises to provide factual material at a later date in support of a proffered contention do not support the contention’s admissibility.”²⁵⁰

Challenging the expertise of Dr. Wing, Applicant also states that he “identifies no deficiencies in the Application,” asserting “only that ‘[t]he 1987 evacuation plan needs to be closely reexamined to meet the current and projected population increases.’”²⁵¹ Applicant argues that this “conclusory assertion, little more than a claim that the evacuation plan ought to be studied, is not an adequate basis for a contention,”²⁵² and points out that “emergency plans are periodically reviewed to ensure they are ‘adequate throughout the life of any plant even in the face of changing demographics and other site related factors.’”²⁵³

The Staff likewise cites Commission holdings “that emergency planning issues are not admissible in a license renewal proceeding,” stating also that, while “Petitioner labeled the emergency planning contention as ‘environmental,’” the “plain language of the contention shows the issue is safety.”²⁵⁴ Staff further notes that, “[a]lthough Contention EC-3 is inadmissible, NRC regulations provide two other procedural mechanisms (10 C.F.R. §§ 2.206 and 2.802) by which Petitioners may pursue their concerns about the adequacy of the Applicants’ current emergency plan.”²⁵⁵

²⁴⁹ Applicant’s Answer at 34 (citing Attachment 6 to Petition at 5, 7, 2).

²⁵⁰ *Id.* (citing Petition at 38 n.26; *Millstone*, CLI-04-36, 60 NRC at 639).

²⁵¹ *Id.* at 31, 34 (citing Petition at 36-37 & Attachment 4 to Petition ¶ 12).

²⁵² *Id.* at 34-35 (citing *Rancho Seco*, LBP-93-23, 38 NRC at 246).

²⁵³ *Id.* at 35 n.23 (citing *Turkey Point*, CLI-01-17, 54 NRC at 9).

²⁵⁴ Staff’s Response at 22.

²⁵⁵ *Id.* at 23 n.29 (citing *Millstone*, CLI-05-24, 62 NRC at 562-63).

3. Reply of Petitioners on Contention EC-3

In reply, in addition to their general argument that their contentions are material and have a legal basis, explanations supported by evidence, documents, facts and/or proposed expert testimony, Petitioners refer back to the Petition for its “length[y] discuss[ion]” showing that “the evacuation plans for the SHNPP are grossly inadequate because of the changing conditions.”²⁵⁶ Stating that “[t]he population around the SHNPP has significantly increased from 1987 to the present, from the present to the end of the initial licensing period, and during the period of the licensing extension,” and relying on the same “reasonable assurance” argument they make regarding Contention TC-1, Petitioners argue that, “[s]imilarly . . . , there is no reasonable assurance that the current inadequacies of the plans, and the likely compounded inadequacies in the future, will be resolved in a manner that protects public health and safety.”²⁵⁷

4. Board Ruling on Contention EC-3

The Commission has clearly stated that emergency planning issues are not within the scope of a license renewal proceeding as a safety issue. “Issues like emergency planning — which already are the focus of ongoing regulatory processes — do not come within the NRC’s safety review at the license renewal stage.”²⁵⁸ However, a contention challenging the input data for certain parameters in a severe accident mitigation alternatives, or SAMA, analysis, which parameters are related to emergency planning issues, has been admitted in another license renewal proceeding, as an environmental issue.²⁵⁹ In that proceeding, which involves the Pilgrim plant in Massachusetts, the licensing board admitted the contention to the extent that it

²⁵⁶ Petitioners’ Reply at 11.

²⁵⁷ *Id.*

²⁵⁸ *Turkey Point*, CLI-01-17, 54 NRC at 10; *see also Millstone*, CLI-05-24, 62 NRC at 567.

²⁵⁹ *See Pilgrim*, LBP-06-23, 64 NRC at 338-41.

concerned specific and supported challenges to SAMA input data in three areas — evacuation times, economic consequences, and meteorological patterns.²⁶⁰ The board found that, by focusing on “the accuracy of certain assumptions and input data used in the SAMA computation and how they affect the validity of the SAMA analysis under NEPA,” the petitioners therein raised a valid environmental issue concerning severe accidents and SAMAs, which is a legitimate “category 2” environmental issue in a license renewal proceeding.²⁶¹ We are not aware of any other license renewal proceeding in which a contention relating in any way to emergency planning issues has been admitted.

In contrast to the contention that was admitted in *Pilgrim*, Petitioners herein do not challenge the input data in the SAMA analysis, nor indeed do they address those parts of the Application’s Environmental Report that address evacuation, population density, and related issues.²⁶² Thus they have failed to bring the contention within the scope of license renewal, failed to “demonstrate that the issue raised in the contention is material to the findings the NRC

²⁶⁰ *See id.*

²⁶¹ *Id.* at 340.

²⁶² *See, e.g.*, Application, Environmental Report at E-27 to E-29; E-129 to E-130; E-138 to E-141. In addition, we note that during oral argument Applicant’s counsel stated that Shearon Harris has its own emergency plan that does take into account updated population figures, contrary to Petitioners’ assertions about population growth. Tr. at 58-59. This Emergency Plan states that the

Evacuation Time Estimate (ETE) . . . will be considered valid until the population with the 10-mile EPZ has increased by greater than 10% since the last ETE was determined. If the population is found to have increased by greater than 10% than a revised ETE will be established using appropriate guidance in NUREG/CR-4831, “State of the Art in Evacuation Time Estimate Studies for Nuclear Power Plants.” An ETE update should be performed every five years to ensure the adequacy of other evacuation assumptions.

Shearon Harris Nuclear Power Plant, Docket No. 50-400/License No. NPF-63, Changes to Emergency Plan and Emergency Plan Implementing Procedures, Revision 52 (Jan. 3, 2007) (ADAMS Accession No. ML070100384).

must make to support the action that is involved in the proceeding,” and failed to provide “sufficient information to demonstrate a genuine dispute with the applicant on a material issue of law or fact,” as required under 10 C.F.R. § 2.309(f)(1)(iii), (vi), and (vi). As such, we must deny the admission of Contention EC-3.

VI. Petitioners’ Request for Backfits Relating to Air Attacks and Fires

Petitioners include as a final argument in their petition the assertion that, in light of their contentions, it is

evident . . . that a backfit is needed for all applications of inoperable fire barrier systems[,] including the rerouting of electrical cables out of fire zones as identified in NUREG-0800 BTP 9.5.1 and 10 C.F.R. 50 Appendix R Paragraph III.G.2 [as well as] upgrading inoperable fire barrier systems with qualified, maintainable and inspectable fire barrier systems to assure that post-fire safe shutdown systems will be maintained to be free of fire damage.”²⁶³

Further, they argue, backfits are necessary in order “to prevent aviation attacks and the fires and explosions caused by those attacks [and] to minimize the risk to public health and safety from these deliberate malicious actions.”²⁶⁴ Finally, in the “Statutory and Regulatory Framework” section of their Petition, they cite 10 C.F.R. § 50.109(a)(5), which provides:

The Commission shall always require the backfitting of a facility if it determines that such regulatory action is necessary to ensure that the facility provides adequate protection to the health and safety of the public and is in accord with the common defense and security.²⁶⁵

The Applicant objects to Petitioners’ request for backfits on the basis that it is unrelated to aging and therefore beyond the scope of this proceeding, and that it is an impermissible challenge to the NRC regulation at 10 C.F.R. § 73.1, defining the radiological sabotage against

²⁶³ Petition at 38-39.

²⁶⁴ *Id.* at 39.

²⁶⁵ *Id.* at 17.

which a licensee must defend.²⁶⁶ The NRC Staff also objects to Petitioners' backfit request, relying on a recent decision of the Commission on requests for backfits that were made to the Commission in the *Pilgrim* and *Vermont Yankee* license renewal proceedings.²⁶⁷ Staff quotes the Commission's ruling that such a request "amounts to a request for agency enforcement action, a request not suitable for a license renewal adjudication, but perhaps suitable for consideration under 10 C.F.R. § 2.206."²⁶⁸ Staff argues that, just as in the situation presented in *Vermont Yankee*, the Petitioners' request for the imposition of backfit requirements is not a proper subject for consideration in this proceeding. Although backfitting might have been a proper subject for Petitioners' § 2.206 petition, Staff argues, their request for the imposition of backfit requirements as part of this license renewal proceeding should be rejected.²⁶⁹

As the Staff argues, the Commission has ruled that a petition for backfits is essentially a request for enforcement action under 10 C.F.R. § 2.206 and is not cognizable in a license renewal adjudication. Therefore, under the authority of CLI-06-26, we must DENY Petitioners' request for the same in this proceeding.

VII. Petitioners' Motion for Stay

During the July 17 oral argument on Contention TC-1, Petitioners' counsel moved to stay this proceeding until Applicant's intended license amendment request under 10 C.F.R. § 50.48(c)(2)(vii), to adopt as an alternative means of fire protection compliance for Shearon

²⁶⁶ Applicant's Answer at 22-23 & n.16.

²⁶⁷ Staff Response at 23-24 (citing *Entergy Nuclear Operations Inc.* (Pilgrim Nuclear Power Station), *Entergy Nuclear Vermont Yankee, LLC*, and *Entergy Nuclear Operations, Inc.* (Vermont Yankee Nuclear Power Station), CLI-06-26, 64 NRC 225, 226 (2006)).

²⁶⁸ *Id.* at 23 (citing *Vermont Yankee*, CLI-06-26, 64 NRC at 226-27).

²⁶⁹ *Id.* at 23-24.

Harris NFPA Standard 805, has been filed and accepted.²⁷⁰ As support for this motion Petitioners' cite the authority of the Board and Board chair under 10 C.F.R. §§2.321(c), 2.319(h), 2.307, and 2.323(g), relating to the duties and powers of licensing board and chairs, disposing of procedural requests, extension and reduction of time limits, and stays.²⁷¹

The NRC Staff and Applicant urge denial of the motion for stay, citing case law for the principle that, only if one has been admitted as a "party" to a proceeding, through showing standing and submitting an admissible contention, can one have a request for stay considered by a presiding officer.²⁷² Applicant and Staff also point to certain factors that should be considered in ruling on any request for stay, namely: (1) whether the movant would otherwise be irreparably injured in the absence of a stay; (2) whether the movant demonstrates a "strong showing" that it will succeed on the merits; (3) whether a stay would be to the detriment of other parties; and (4) what is in the public interest.²⁷³ Staff and Applicant point out that these factors, which come from the opinion of the United States Court of Appeals for the District of Columbia

²⁷⁰ Tr. at 183.

²⁷¹ Motion for Stay at 1.

²⁷² Staff Response to Motion to Stay at 4-5 (citing *Vermont Yankee*, CLI-07-13, 65 NRC at 214-15); Applicant Response to Motion to Stay at 2-3 (citing *Texas Utils. Elec. Co.* (Comanche Peak Steam Electric Station, Unit 2), CLI-93-2, 37 NRC 55, 57-58 n.2 (1993); *Vermont Yankee*, CLI-07-13, 65 NRC at 214-15; *In re Shieldalloy Metallurgical Corp. and NUREG-1757*, 2007 NRC LEXIS 11 at *3-4 (Jan. 12, 2007)).

²⁷³ Applicant Response Motion to Stay at 6; see also *id.* at 5-7 (citing *Virginia Petroleum Jobbers Ass'n v. Federal Power Commission*, 259 F.2d 921, 925 (D.C. Cir. 1958); *Comanche Peak*, CLI-93-2, 37 NRC at 58 n.2; *U.S. Dep't of Energy, Project Mgmt. Corp., Tenn. Valley Auth.* (Clinch River Breeder Reactor Plant), ALAB-721, 17 NRC 539, 543 (1983)); *Alabama Power Co.* (Joseph M. Farley Nuclear Plant, Units 1 and 2), CLI-81-27, 14 NRC 795, 797 (1981); *Pub. Serv. Co. of Indiana, Inc.* (Marble Hill Nuclear Generating Station, Units 1 and 2), ALAB-493, 8 NRC 253, 270 (1978)); Staff Response to Motion to Stay at 4 (citing *Energys Nuclear Vermont Yankee, L.L.C., and Energys Nuclear Operations, Inc.* (Vermont Yankee Nuclear Power Station), CLI-06-8, 63 NRC 235, 237 n.4 (2006)).

Circuit in the *Virginia Petroleum Jobbers* case,²⁷⁴ have been incorporated into the NRC rules at 10 C.F.R. § 2.342 and have been broadly applied by the Commission in ruling on stay requests.²⁷⁵

The Commission in the *Comanche Peak* proceeding, and subsequently in *Vermont Yankee*, CLI-07-13, did indicate that, in order to request a stay, the requestor must have been admitted as a party in a proceeding by showing standing and submitting an admissible contention.²⁷⁶ In *Comanche Peak*, the Commission also noted that, even assuming that the requestor was a party, it had not met the four-factor test cited by Staff and Applicant.

In this proceeding, as we admit no contentions herein, Petitioners are not a “party” under the above case law, and therefore are not permitted to file a motion for stay. Moreover, they have not addressed the four-factor test specifically. Further, because it is possible their concerns will be met when the Applicant’s license amendment request must be filed, we cannot find that Petitioners would be irreparably injured by the absence of a stay at this time. Thus, notwithstanding their argument that the fact the current license at issue does not expire until 2027 suggests the Applicant will not be harmed by a stay, we must DENY Petitioners’ motion for stay.

VIII. CONCLUSION and ORDER

In conclusion, although we find that Petitioners have established standing in this proceeding, we further find that their petition may not be granted because they have not at this time submitted an admissible contention, for the reasons we have stated above.

²⁷⁴ 259 F.2d 921.

²⁷⁵ Staff Response to Stay Motion at 4; Applicant Response to Stay Motion at 5-6.

²⁷⁶ *Comanche Peak*, CLI-93-2, 37 NRC at 57-58; *Vermont Yankee*, CLI-07-13, 65 NRC at 214-15.

Therefore, based on the preceding rulings, findings, and conclusion, it is, this 3rd day of August, 2007, ORDERED that the Petition to Intervene of North Carolina Waste Awareness and Reduction Network and Nuclear Information and Resource Service be DENIED and this proceeding be TERMINATED at this time.

Because we rule herein on an intervention petition, any appeal to the Commission from this Memorandum and Order must be filed within ten (10) days after it is served, in accordance with the provisions of 10 C.F.R. § 2.311.

THE ATOMIC SAFETY
AND LICENSING BOARD

/RA/

Ann Marshall Young, Chair
ADMINISTRATIVE JUDGE

/RA/

Dr. Peter S. Lam
ADMINISTRATIVE JUDGE

/RA/

Dr. Alice Mignerey
ADMINISTRATIVE JUDGE

Rockville, Maryland
August 3, 2007²⁷⁷

²⁷⁷ Copies of this Order were sent this date by Internet e-mail transmission to all participants or counsel for participants.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of)
)
CAROLINA POWER & LIGHT CO.) Docket No. 50-400-LR
)
)
(Shearon Harris Nuclear Power Plant,)
Unit 1))

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing LB MEMORANDUM AND ORDER (RULING ON STANDING AND CONTENTIONS OF PETITIONERS NORTH CAROLINA WASTE AWARENESS AND REDUCTION NETWORK AND NUCLEAR INFORMATION AND RESOURCE SERVICE) (LBP-07-11) have been served upon the following persons by U.S. mail, first class, or through NRC internal distribution.

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Docket No. 50-400-LR
LB MEMORANDUM AND ORDER (RULING ON STANDING
AND CONTENTIONS OF PETITIONERS NORTH CAROLINA
WASTE AWARENESS AND REDUCTION NETWORK AND
NUCLEAR INFORMATION AND RESOURCE SERVICE) (LBP-07-11)

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Office of the Secretary of the Commission

Dated at Rockville, Maryland
this 3rd day of August 2007